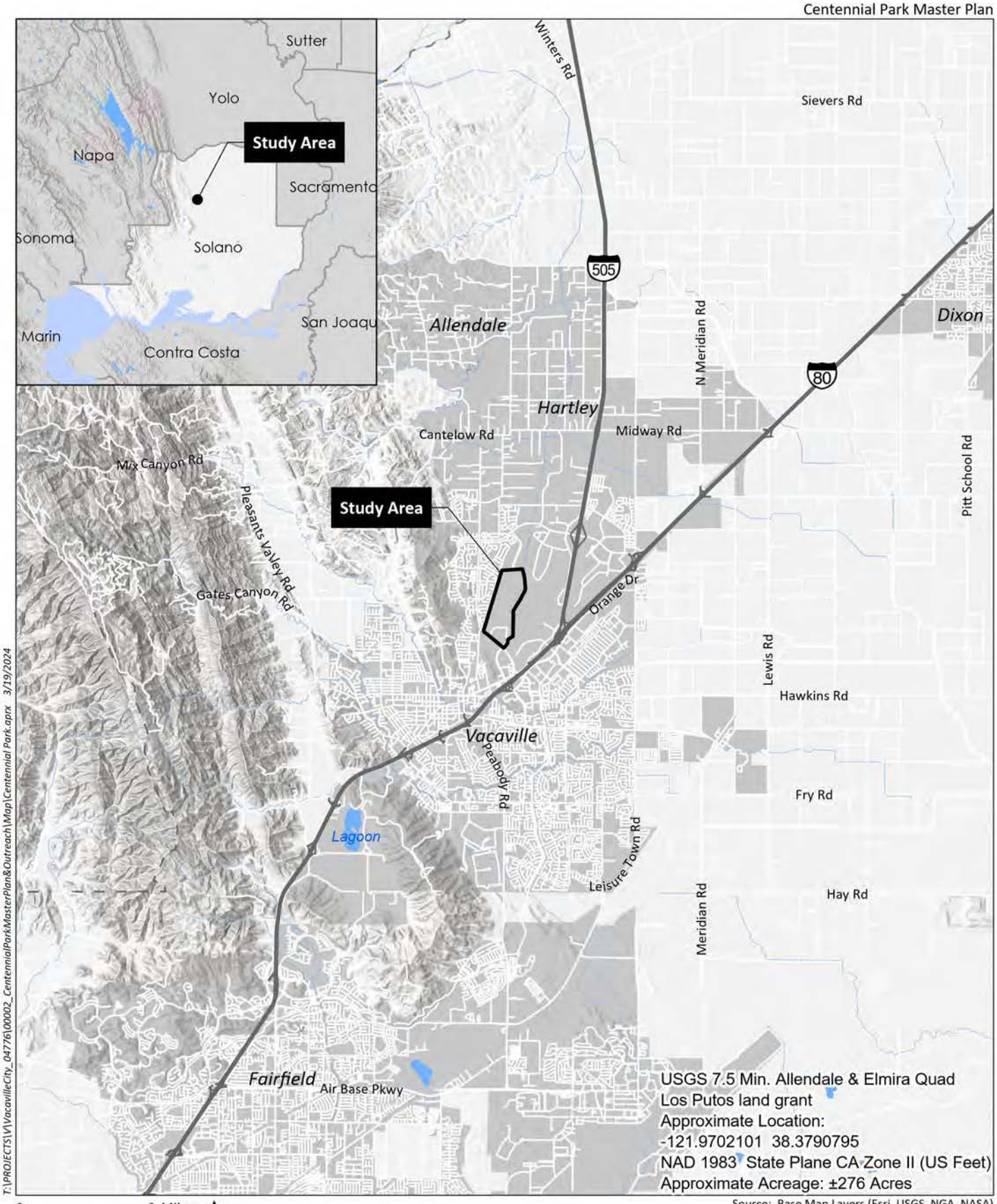
Appendix A

Figures



T:\PROJECTS\V1\VacavilleCity_04776\00002_CentennialParkMasterPlan&Outreach\Map\Centennial Park.aprx 3/19/2024

HELIX Environmental Planning

Site and Vicinity Map

Figure 1



Source: Aerial (Maxar, 7/23/2022)

HELIX Environmental Planning

Aerial Map

Figure 2



T:\PROJECTS\V1\VacavilleCity_04776\00002_CentennialParkMasterPlan&Outreach\Map\Fig3_MasterPlan_20231208.indd

Source: HEGIS 2023

RC CAR TRACK
ADD FENCE AND GATE AT EXISTING ROLLER HOCKEY COURT, MAY BE USED FOR OVERFLOW PARKING
SKATE PARK
WATER PLAY
ENHANCED GATED ENTRY
RESTROOM BUILDING
CENTRAL LAWN
3 LIGHTED BASKETBALL COURTS
UPGRADE EXISTING CHAIN LINK FENCE AT PINE TREE CREEK CROSSING
RESTROOM BUILDING
CUT SLOPE ALONG FRONTAGE AND SOFTEN WITH GRADE VARIATION AND NATIVE PLANTINGS
6 LIGHTED TENNIS COURTS
5K RACE LOOP, TYP.
NEW TRAILS, PICNIC AREAS, AND TREE PLANTING SOUTH OF PINE TREE CREEK
ENHANCED GATED ENTRY
PERIMETER TRAIL WITH OVERLOOK
EXPANDED EXISTING WETLANDS, TYP.
PEDESTRIAN UNDERPASS
BALL FIELD MAINTENANCE BUILDING
EXISTING WETLANDS, TYP.
COMMUNITY RECREATION CENTER AND OUTDOOR SEATING
TRAILHEAD PLAZA
VACAVILLE UNITED SOCCER CLUB FACILITIES
VEHICULAR DROP-OFF AREA
DUMPSTER ENCLOSURE
SOCCER FACILITIES MAINTENANCE BUILDING
SOCCER COMPLEX EXPANSION (ONE ADDITIONAL LIGHTED FULL SIZE FIELD)
DETENTION BASIN
MEADOW/NATURALIZED AREA
12' ASPHALT MULTI-USE TRAIL, TYP.
DETENTION BASIN
RESTORED RIPARIAN CORRIDOR
WOODLANDS WITH INTEGRATED TRAIL SYSTEM
FENCED BIKE SKILLS COURSE
GROUP PICNIC AREA
HIGH POINT ELEVATED (APPROXIMATELY 65 - 85 FEET) WITH OVERLOOK STRUCTURE
RESTROOM
SPECTATOR VIEWING PLAZA
BIKE PARK MAINTENANCE BUILDING
RAISE ROAD TO IMPROVE VISIBILITY
ENHANCED GATED ENTRY
LIMITS OF CAPPED LANDFILL
DOG PARK WITH LIGHTING, ELEVATED APPROXIMATELY 5 FEET
APPROXIMATE LIMITS OF 5 FOOT FILL
HABITAT RESTORATION ZONE, TRAILS AND CREEK OVERLOOK
GROUP PICNIC AREA
NATIVE PLANT AND POLLINATOR GARDENS
GROUP PICNIC AREA
NATURE PLAYSCAPE
EVENT PAVILION, TRELLISES AND EVENT LAWN WITH RESTROOMS
RESTROOM AND MAINTENANCE BUILDINGS
GROUP PICNIC AREA
ASPHALT MULTI-USER TRAIL, TYP.
18 HOLE BEGINNER/INTERMEDIATE DISC GOLF COURSE, TYP.
OBSERVATION POINT, (ELEVATED UP TO APPROXIMATELY 30 FEET) WITH OVERLOOK STRUCTURE
SOFT SURFACE TRAIL, TYP. (UNPAVED)
OVERFLOW GRAVEL PARKING LOT
NEW HOPE CHRISTIAN FELLOWSHIP
ALLISON DRIVE
BROWNS VALLEY PARKWAY
PINE TREE CREEK
HORSE CREEK - SOUTH FORK
HORSE CREEK - MIDDLE FORK
HORSE CREEK - NORTH FORK
FIELD 1
FIELD 2 (LIGHTED)
FIELD 3 (LIGHTED)
FIELD 4 (LIGHTS MAY BE ADDED)
EXISTING BALLFIELDS
EXISTING HORSE CREEK SOCCER COMPLEX

PHASING LEGEND

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5
- NO IMPROVEMENTS PLANNED IN FUTURE PHASE

T:\PROJECTS\VV\VacavilleCity_04776\00002_CentennialParkMasterPlan&OutreachMap\Fig4_PhasingPlan_20240112.indd ABC-01 04/17/17

HELIX Environmental Planning

Phasing Plan

Figure 4



Source: Aerial (Maxar, 7/23/2022)

HELIX Environmental Planning

Key Observation Point Locations Map

Figure 5



T:\PROJECTS\V\VacavilleCity_04776\00002_CentennialParkMasterPlan&Outreach\Map\ISMND\Fig6_KOPA_PreProject_20240607.indd

Source: HELIX, 2024

HELIX Environmental Planning

KOP A - Pre-Project

Figure 6



Source: HELIX, 2024

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HELIX Environmental Planning

KOP A - Post-Project

Figure 7



Source: HELIX, 2024

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HELIX Environmental Planning

KOP B - Pre-Project

Figure 8



T:\PROJECTS\VV\VacavilleCity_04776\00002_CentennialParkMasterPlan&Outreach\Map\SMND\Fig9_KOPA_PreProject_20240607.indd

Source: HELIX, 2024

HELIX Environmental Planning

KOP B - Post-Project

Figure 9



Source: HELIX, 2024

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HELIX Environmental Planning

KOP C - Pre-Project

Figure 10



Source: HELIX, 2024

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HELIX
Environmental Planning

KOP C - Post-Project

Figure 11



T:\PROJECTS\V1\Vacaville\City_04776\00002_CentennialParkMasterPlan&Outreach\Map\SMND\Fig12_KOPD_PreProject_20240607.indd

Source: HELIX, 2024

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KOP D - Pre-Project

Figure 12



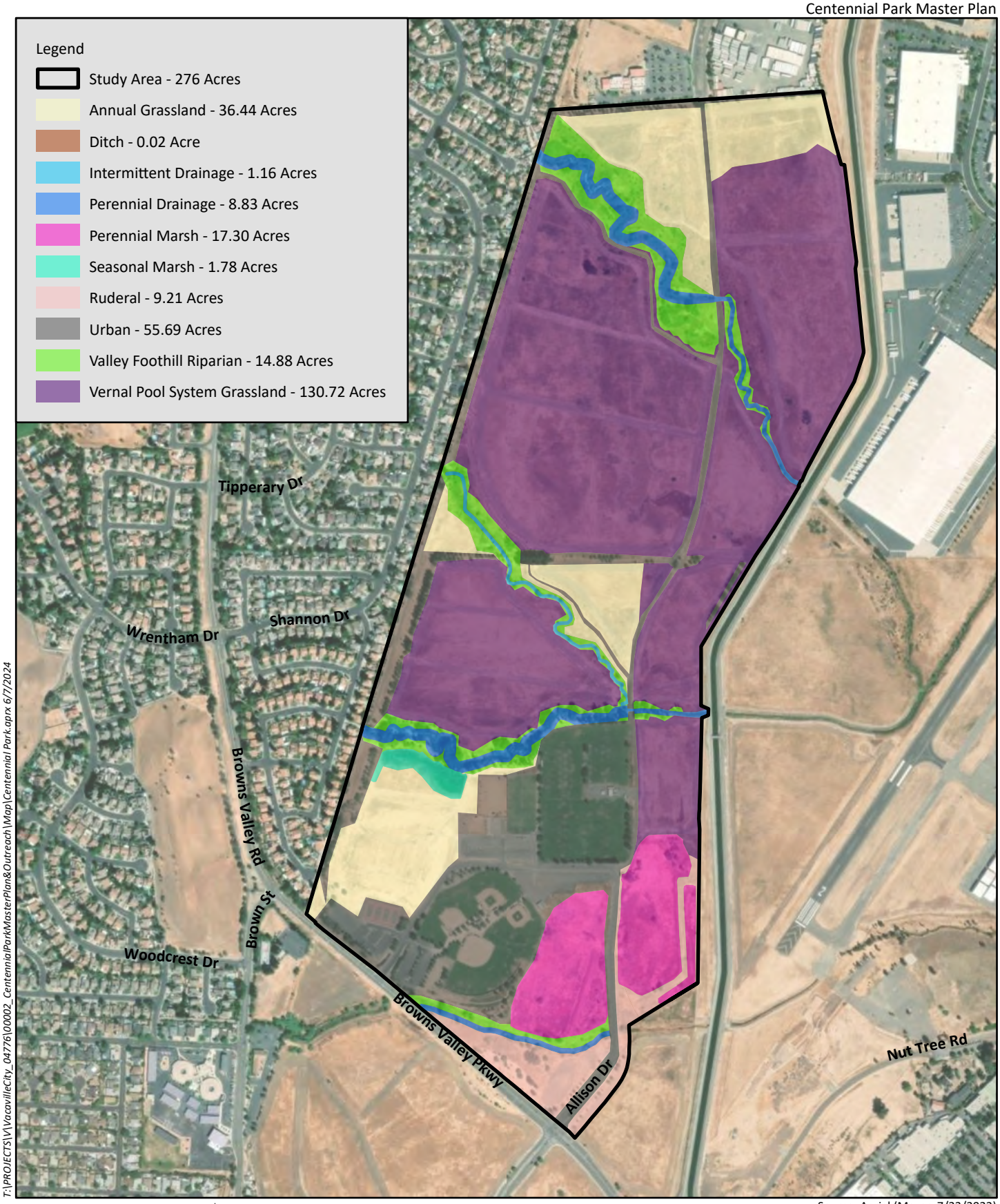
Source: HELIX, 2024

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HELIX Environmental Planning

KOP D - Post-Project

Figure 13



Source: Aerial (Maxar, 7/23/2022)

HELIX Environmental Planning

Biological Communities

Figure 14

Appendix B

Master Plan



CENTENNIAL PARK
MASTER PLAN

CENTENNIAL PARK
MASTER PLAN

Prepared for:

City of Vacaville
650 Merchant Street
Vacaville, CA 95688

Prepared by:

HELIX Environmental Planning, Inc.
1180 Iron Point Road, Suite 130
Folsom, CA 95630

July 2023 | 04776.00002.001

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1.0 MASTER PLANNING PROCESS

1.1 MASTER PLAN PROCESS

The City of Vacaville (City) contracted with MIG, Inc. (MIG) in 2017 to simultaneously prepare the citywide Park and Recreation Master Plan and the site-specific Centennial Park Master Plan. The two projects shared stakeholder and community outreach efforts and built on previous planning efforts and park improvements. MIG completed the administrative draft of the Centennial Park Master Plan in June 2020 (Appendix A).

In July 2022, HELIX Environmental Planning, Inc. (HELIX) was contracted to complete the Centennial Park Master Plan based on the 2020 administrative draft master plan. This document builds on the work done by MIG, maintaining the overall master plan approach of three recreation zones and a majority of the program elements. Some elements of the master plan were modified based on community input, maintenance concerns, and changing City recreation needs. This document further develops a phasing plan and cost estimate for the various elements and features included in the revised illustrative master plan.

1.2 EXISTING CONDITIONS

Since the development of the 2020 administrative draft master plan, several changes have been made to Centennial Park. An interim soccer field was constructed on the west side of the Horse Creek Soccer Complex by the Vacaville United Soccer Club, and an additional gravel parking lot was constructed to the south of the soccer complex. The City also constructed an interim dog park west of the new field. The revised Existing Conditions diagram is shown on page 3.

1.3 COMMUNITY ENGAGEMENT

Community engagement has been an important element of the entire master planning process. In addition to the community engagement activities described below, the development of the master plan also considered the results of the 2013 Vacaville Recreation Needs Assessment and the policies of the 2015 General Plan update.

1.3.1 Initial Outreach

As part of the joint Park and Recreation Master Plan and Centennial Park Master Plan projects, MIG conducted a series of outreach activities from 2017 through 2018. Eleven pop-up surveys in late 2017 took advantage of other City events to solicit feedback from over 500 people. Between February and May 2018, almost 600 people participated in an online survey. A combination of in-person outreach at the City's Recreation Expo, followed by online activities garnered feedback from almost 500 people in 2019. MIG also worked with an Ad Hoc Committee consisting of City staff and members of the Parks and Recreation Commission and presented the project at public meetings of the Parks and Recreation Commission and City Council.

1.3.2 2022 Community Meetings

HELIX facilitated two community meetings in December 2022 to present the draft revised illustrative master plan and listen to community comments and concerns. The first meeting was an in-person open house event on Saturday, December 3rd, and was attended by approximately 60 community members (Appendix B). The second meeting was a virtual meeting held on Wednesday, December 7th, and attended by approximately 30 community members (Appendix C). A consistent theme was heard in both meetings that included both a desire for more active use facilities, such as lighted sports courts and an upgraded dog park, and the preservation of the existing open space and natural areas. Commonly raised concerns included questions about how new facilities will be maintained, whether the proposed parking is sufficient, overall water and energy usage, and potential impacts to surrounding residents.

EXISTING CONDITIONS

City of Vacaville

CENTENNIAL PARK MASTER PLAN

Sidewalk, multi-use (bike) trail + path connection

Power-lines/poles along multi-use trail + Browns Valley Parkway

Roller hockey

TENNIS COURTS (damaged)

Capped Landfill

Drainage ditch adjacent to trail

Uncontrolled intersection

Borrow Pit

Native + formal tree planting along trail

Low area

36" Solano Irrigation District water main

BASEBALL FIELDS (public access)

Interim Dog Park

Need to verity adjacent residential property lines

Mounded area screens view

VUSC field

Storage container

Casuarina tree grove

Street parking

HORSE CREEK SOCCER COMPLEX (lighted fields, VUSC)

Grass Area

Historic Homestead Area

Overflow parking

City Open Space

Sewer easement

Grass Area

Existing dirt piles

Plateau Area

Roadway edge eroded

Grass Area

Plateau Area

Grass Area

RESIDENTIAL AREA

NEW HOPE CHRISTIAN FELLOWSHIP

INDUSTRIAL AREA

NUT TREE AIRPORT

PUTAH SOUTH CANAL

BROWNS VALLEY PKWY

ALLISON DR

PINE TREE CREEK

HORSE CREEK south fork

HORSE CREEK middle fork

HORSE CREEK north fork

Dublin Way

Shamrock Ct

Waterford Dr

Galway Ct

Tara Ct

Tyone Ct

Derry Ct

Antrim

Roscommon Dr

Donegal

views to hills

views to hills

Ped/Bike

Auto

Ped

Bridge

Extreme Winds
From the North

Limited Connectivity
Adjacencies to airport, canal, industrial, and residential areas

Wildlife Habitat
Including sensitive species, nesting birds, beavers, etc.

Relatively Flat Site, Expansive Views

Portions of Creek Heavily Eroded
Bank erosion must be addressed

LEGEND

- PROPERTY LINE
- PAVED ROAD (limited sidewalk)
- GRAVEL ROAD
- PAVED MULTI-USE TRAIL
- PATH
- SIDEWALK
- UTILITIES
- ACCESS (auto, ped/bike)
- PARKING LOT
- FENCE
- RIDGE/ELEVATED AREA
- CAPPED LANDFILL
- RIPARIAN AREA (projected)
- RESTORATION AREA
- WETLAND AREA (projected)
- CREEK (40 ft. minimum setback)
- PUTAH SOUTH CANAL (barrier)
- BIRD BOX AREA (21 boxes)
- GATE
- RESTROOM
- CULVERT
- DIRECTION OF SLOPE
- POINT OF INTEREST (interpretive experience, view, bench)

0 1/8 mile 1/4 mile

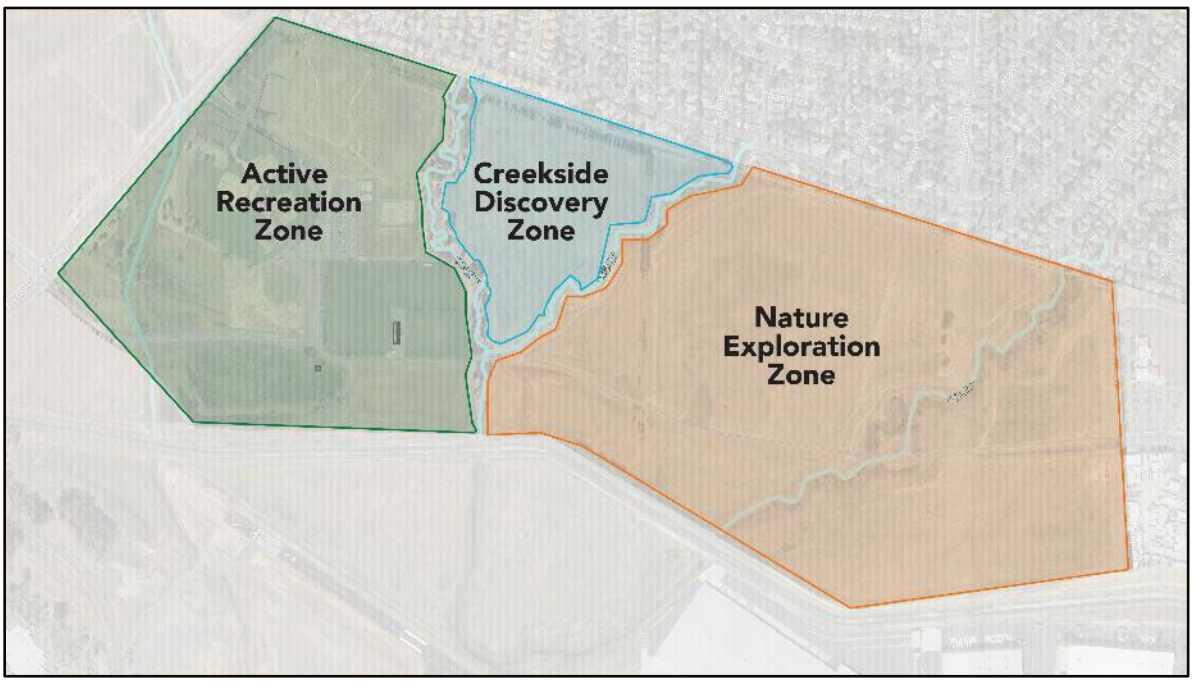
0' 400' 800' 1200'

NORTH

2.0 DESIGN APPROACH

This master plan is consistent with the vision of Centennial Park as “a place to play, gather, connect with nature, and preserve habitat”. The master plan continues the concept of three distinct zones: the Active Recreation Zone to the south, the Creekside Discovery Zone in the center, and the Nature Exploration Zone to the north (see Figure 2 below). Conceptual ideas for these zones are discussed in detail in the administrative draft master plan (Appendix A, Chapter 2). Changes between the 2020 administrative draft master plan and this master plan are discussed in Sections 2.1 through 2.3. The illustrative master plan graphic of the entire site is shown on page 5 (Figure 3).

Figure 2: PARK ZONE MAP



2.1 PARKING AND CIRCULATION

One of the primary changes included in this master plan is the creation of a full loop road within the park to improve access to all three zones and reduce potential traffic congestion by eliminating dead-ends. Additionally, the parking lots in the Creekside Discovery Zone were combined and located more centrally to the activity areas. The proposed project will almost triple the available parking in Centennial Park from approximately 380 existing parking spaces to approximately 1,038 parking spaces at the completion of development. Additionally, four potential overflow parking areas have been identified for use during special events, which can accommodate an additional approximately 210 cars. If desired, additional parallel parking could be added along portions of the site access roads, potentially adding approximately 140 parking spaces. However, the exact locations suitable for parallel parking will be determined during detailed design based on traffic and road design requirements. Parking quantities and vehicular circulation is shown in Figure 4.



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CENTENNIAL PARK

CITY OF VACAVILLE

MASTER PLAN

DATE: 4/27/2023

200 0 200 400 600

SCALE IN FEET

CENTENNIAL PARK MASTER PLAN

VACAVILLE



PARKING/CIRCULATION LEGEND

VEHICULAR CIRCULATION

PARKING LOT QUANTITIES
STANDARD
ADA
STANDARD AND ADA COMPLIANT SPACES
1,038 TOTAL STANDARD SPACES
64 TOTAL ADA COMPLIANT SPACES

POTENTIAL OVERFLOW PARKING FOR SPECIAL EVENT USE
OVERFLOW
(210 TOTAL OVERFLOW SPACES)

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FOLSOM, CALIFORNIA 95630
(916) 365-8700
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CENTENNIAL PARK
CITY OF VACAVILLE

PARKING AND CIRCULATION PLAN

DATE: 7/26/2023

30 0 30 60 90
SCALE IN FEET

CENTENNIAL PARK MASTER PLAN
VACAVILLE

2.2 ACTIVE RECREATION ZONE

The Active Recreation Zone encompasses the area between Browns Valley Parkway and the south fork of Horse Creek, including the majority of the existing park improvements. Major elements in this zone are shown in Table 1, along with a summary of changes between the administrative draft master plan and the this master plan. Further discussion of each major amenity and a detailed program can be found in Chapter 3 of Appendix A.

Table 1
SUMMARY OF ACTIVE RECREATION ZONE ELEMENTS

Park Element	Changes Incorporated in Master Plan
Approximately 70,000 to 75,000 square foot community recreation center	No change
Water play area and central lawn with large group picnic shelters	May include misters or other low-water use features rather than a full splash pad
Walking trails around existing wetlands and along Pine Tree Creek	Picnic tables and additional loop south of Pine Tree Creek added and existing wetland expanded
Enhanced landscape frontage, entry monuments, and gates	No change
Dog Park	Added evening safety lighting and will raise portions of the area by up to five feet
Skate Park	No change
RC (remote-controlled) car track	Added to plan
Renovated roller hockey court	Perimeter fencing added to prevent vehicular access except as needed for special event overflow parking
Renovated ballfield complex with entry plazas and permanent maintenance building	Maintenance building added
Lighted basketball courts	Reduced from four to three
Tennis courts	Expanded from four to six courts
Horse Creek Soccer Complex	Added additional maintenance building and dumpster enclosure
Parking lots	Total of 840 paved parking spaces and up to 160 overflow parking spaces for special events

2.3 CREEKSIDE DISCOVERY ZONE

The Creekside Discovery Zone is located in the wedge between the south fork and middle fork of Horse Creek along the west side of the park. It includes an existing multi-use trail along the west edge of the park. Major elements in this zone are shown in Table 2, along with a summary of changes between the administrative draft master plan and this master plan. Further discussion of each major amenity and a detailed program can be found in Chapter 4 of Appendix A.

Table 2
SUMMARY OF CREEKSIDE DISCOVERY ZONE ELEMENTS

Park Element	Changes Incorporated in Master Plan
Nature playscape	Moved west to better align with a path to the water play area and central lawn
Sand volleyball courts	Congregated to form a single complex, lighted, and moved to the east farther from adjacent residences
Event pavilion	Size reduced to create a more enclosed event space rather than an open amphitheater
Community orchard	Removed
Pollinator garden	Native plant and pollinator garden
Habitat restoration and creekside trails	Added pedestrian bridge over the south fork of Horse Creek
Disc golf course	Added (9 holes)
Group picnic areas	Minor adjustments to location
Parking lots and access road	Total of 149 paved parking spaces. Added a small lot on west side of the road to serve the disc golf course and extended access road to form a complete loop with two new vehicular bridges.

2.4 NATURE EXPLORATION ZONE

The Nature Exploration Zone is located north of the middle fork of Horse Creek. It includes existing multi-use trails along the west edge of the park and the creek channels and a gravel utility access road, which will be paved to serve as a multi-use trail. Major elements in this zone are in shown Table 3, along with a summary of changes between the administrative draft master plan and this master plan. Further discussion of each major amenity and a detailed program can be found in Chapter 5 of Appendix A.

Table 3
SUMMARY OF NATURE EXPLORATION ZONE ELEMENTS

Park Element	Changes Incorporated in Master Plan
Bike park	Elevated approximately 65 to 85 feet on a constructed hill, maintenance building and perimeter fencing added
Group picnic area	Moved closer to bike park and parking area
Observation point	Elevated approximately 30 feet on a constructed hill
Meadow	Elevated by up to 30 feet to create rolling topography
Walking trails	Perimeter trail added along east side of park to complete loop
Disc golf course	Added (9 holes)
Parking lots and access road	Total of 49 paved parking spaces. Added 50 spaces in gravel overflow parking lot.

3.0 PHASING AND IMPLEMENTATION

3.1 PHASING

Due to the size of the park and the cost of proposed improvements, the construction of park improvements will be completed in phases over time. The phasing plan was developed based on community input, City recreational needs, available funding, and site development logistics. Not all site improvements within a single phase may be constructed simultaneously. Proposed phasing is shown in the Phasing Plan on page 11.

3.2 CONSTRUCTION COST ESTIMATE

The table below provides an estimate of construction costs for major park elements in 2023 dollars broken down by phase, as shown in Table 4. Soft costs, which include design, permitting and environmental review, inspections, and project management, will vary significantly depending on the project.

Table 4
PHASED COST ESTIMATE

Park Element	Zone	Estimated Cost
Phase 1		
Dog Park	Active Recreation Zone	$5,682,500
Parking Lots and Access Roads for Dog Park	Active Recreation Zone	$1,090,920
Entry and Frontage Landscape	Active Recreation Zone	$1,199,480
Great Meadow Trails and Overlook	Nature Exploration Zone	$3,239,600
Bike Park	Nature Exploration Zone	$4,863,780
Parking Lot and Access Road for Bike Park	Nature Exploration Zone	$1,883,030
Disc Golf (9 holes)	Nature Exploration Zone	$888,060
Soft Costs	--	TBD
	Phase 1 Total	**$18,847,370**
Phase 2		
Community Recreation Center	Active Recreation Zone	$37,753,430
Tennis Courts	Active Recreation Zone	$3,261,210
Trails	Active Recreation Zone	$2,709,390
Parking Lots and Access Roads for Recreation Center	Active Recreation Zone	$5,897,020
Entry Landscape	Active Recreation Zone	$1,135,350
Soft Costs	--	TBD
	Phase 2 Total	**$50,756,400**
Phase 3		
Soccer Complex Renovation	Active Recreation Zone	$3,659,500
Ballfield Complex Renovation	Active Recreation Zone	$1,729,090
Trails	Active Recreation Zone	$1,302,480
Parking Lots and Access Roads for Soccer Complex	Active Recreation Zone	$3,159,000
Soft Costs	--	TBD
	Phase 3 Total	**$9,850,070**

Park Element	Zone	Estimated Cost
Phase 4		
Play Area, Water Play, and Central Lawn with Picnic Facilities and Restroom	Active Recreation Zone	$4,863,100
Skate Park and RC Car Track	Active Recreation Zone	$1,475,350
Basketball Courts	Active Recreation Zone	$1,770,310
Renovate Existing Parking Lots and Access Road	Active Recreation Zone	$4,136,450
Riparian Habitat Restoration	Nature Exploration Zone	$805,770
Soft Costs	--	TBD
	Phase 4 Total	**$13,050,980**
Phase 5		
Event Pavilion and Gardens	Creekside Discovery Zone	$11,588,670
Disc Golf (9 holes)	Creekside Discovery Zone	$594,950
Nature Playscape	Creekside Discovery Zone	$4,272,150
Sand Volleyball Complex	Creekside Discovery Zone	$1,601,190
Riparian Habitat Restoration	Creekside Discovery Zone	$873,370
Trails and Pedestrian Bridges	Creekside Discovery Zone	$6,514,970
Parking Lots and Access Road with three Vehicular Bridges for Creekside Discovery Zone	Creekside Discovery Zone	$3,984,530
Soft Costs	--	TBD
	Phase 5 Total	**$29,429,830**
	GRAND TOTAL	**$121,934,650**

RC CAR TRACK
ADD FENCE AND GATE AT EXISTING ROLLER HOCKEY COURT, MAY BE USED FOR OVERFLOW PARKING
SKATE PARK
WATER PLAY
ENHANCED GATED ENTRY
RESTROOM BUILDING
CENTRAL LAWN
3 LIGHTED BASKETBALL COURTS
UPGRADE EXISTING CHAIN LINK FENCE AT PINE TREE CREEK CROSSING
RESTROOM BUILDING
CUT SLOPE ALONG FRONTAGE AND SOFTEN WITH GRADE VARIATION AND NATIVE PLANTINGS
6 LIGHTED TENNIS COURTS
5K RACE LOOP, TYP.
NEW TRAILS, PICNIC AREAS, AND TREE PLANTING SOUTH OF PINE TREE CREEK
ENHANCED GATED ENTRY
PERIMETER TRAIL WITH OVERLOOK
EXPANDED EXISTING WETLANDS, TYP.
PEDESTRIAN UNDERPASS
BALL FIELD MAINTENANCE BUILDING
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VACAVILLE UNITED SOCCER CLUB FACILITIES
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SOCCER COMPLEX EXPANSION (ONE ADDITIONAL LIGHTED FULL SIZE FIELD)
LIMITS OF CAPPED LANDFILL
DOG PARK WITH LIGHTING, ELEVATED APPROXIMATELY 5 FEET
APPROXIMATE LIMITS OF 5 FOOT FILL
HABITAT RESTORATION ZONE, TRAILS AND CREEK OVERLOOK
GROUP PICNIC AREA
NATIVE PLANT AND POLLINATOR GARDENS
GROUP PICNIC AREA
NATURE PLAYSCAPE
EVENT PAVILION, TRELLISES AND EVENT LAWN WITH RESTROOMS
RESTROOM AND MAINTENANCE BUILDINGS
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DETENTION BASIN
MEADOW/NATURALIZED AREA
12' ASPHALT MULTI-USE TRAIL, TYP.
DETENTION BASIN
RESTORED RIPARIAN CORRIDOR
WOODLANDS WITH INTEGRATED TRAIL SYSTEM
FENCED BIKE SKILLS COURSE
GROUP PICNIC AREA
HIGH POINT ELEVATED (APPROXIMATELY 65 - 85 FEET) WITH OVERLOOK STRUCTURE
ASPHALT MULTI-USER TRAIL, TYP.
18 HOLE BEGINNER/INTERMEDIATE DISC GOLF COURSE, TYP.
OBSERVATION POINT, (ELEVATED UP TO APPROXIMATELY 30 FEET) WITH OVERLOOK STRUCTURE
SOFT SURFACE TRAIL, TYP. (UNPAVED)
OVERFLOW GRAVEL PARKING LOT
RESTROOM
SPECTATOR VIEWING PLAZA
BIKE PARK MAINTENANCE BUILDING
RAISE ROAD TO IMPROVE VISIBILITY
ENHANCED GATED ENTRY
EXISTING BALLFIELDS
FIELD 1
FIELD 2 (LIGHTED)
FIELD 3 (LIGHTED)
FIELD 4 (LIGHTS MAY BE ADDED)
EXISTING HORSE CREEK SOCCER COMPLEX
PINE TREE CREEK
HORSE CREEK SOUTH FORK
HORSE CREEK MIDDLE FORK
HORSE CREEK NORTH FORK
BROWNS VALLEY PARKWAY
ALLISON DRIVE
NEW HOPE CHRISTIAN FELLOWSHIP

PHASING LEGEND

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5
- NO IMPROVEMENTS PLANNED IN FUTURE PHASE

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(916) 365-8700
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CENTENNIAL PARK
CITY OF VACAVILLE

PHASING PLAN

DATE: 4/27/2023

200 0 200 400 600
SCALE IN FEET

CENTENNIAL PARK MASTER PLAN
VACAVILLE

3.3 IMPLEMENTATION

3.3.1 Additional Required Studies and Design

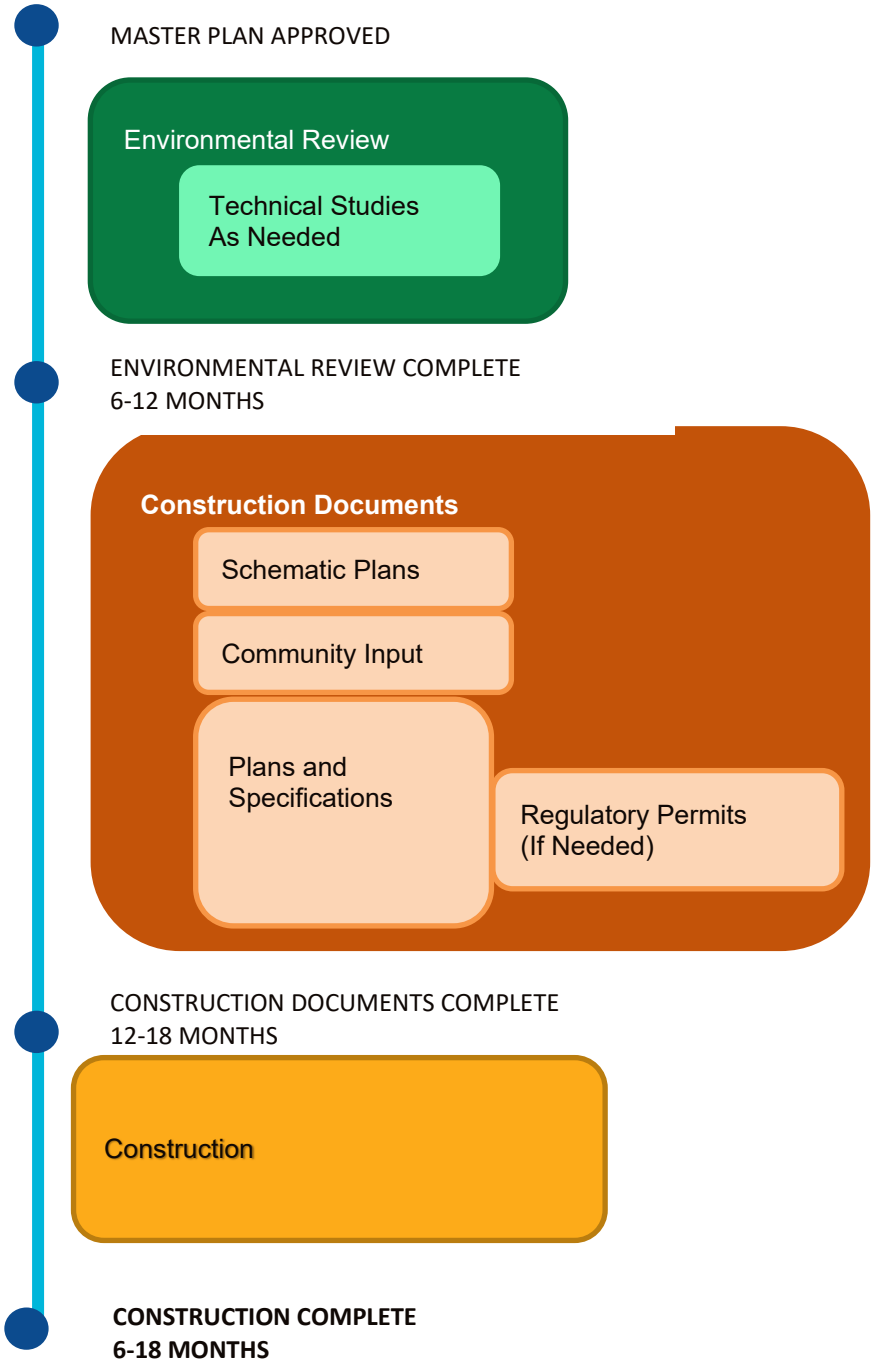
Following approval of this master plan, several additional steps must be completed prior to the construction of park improvements. The first step in the development process is an environmental review of the master plan under the California Environmental Quality Act (CEQA). An initial study will determine whether the project may have significant environmental effects and determine what type of CEQA documentation is required. The CEQA process allows an additional opportunity for public comment. Technical studies may be required to facilitate the CEQA analysis, such as noise, traffic, biological resources, cultural resources, air quality, and greenhouse gas emissions. The final CEQA document will include a variety of mitigation measures that will help guide the detailed design of park elements to limit impacts to sensitive resources. It is expected that this initial CEQA review and associated technical studies may cost between $100,000 and $250,000, depending on the extent of technical studies required.

Construction documents must be prepared for each park element as the City moves forward with development. This detailed design phase will develop the concepts and layout established in the master plan while integrating the minimization and avoidance measures required by the CEQA document. Detailed design of each major park element may include additional community engagement. Park elements that impact sensitive natural resources, such as creeks, wetlands, and riparian areas, may require regulatory permits from state and federal agencies. The exact type of permit required will depend on the regulations in effect at the time and the extent of the proposed impacts to sensitive resources. These permits must be obtained once the final project footprint is established and prior to the start of construction.

3.3.2 Schedule

The schedule for completing additional required studies and design will depend on available funding and City priorities. Typically, the environmental review process, including technical studies, can be completed in six to twelve months. Construction documents for specific park improvements may take twelve to eighteen months to prepare, depending on the scale and complexity of the project area. Preparation of construction documents will typically not begin until funding for an individual phase or element has been identified. Similarly, the construction of park improvements may require six to eighteen months, depending on complexity, material availability, and weather. The typical timeline for planning, design, and construction is shown in Figure 5.

Figure 6:
TYPICAL PLANNING AND DESIGN TIMELINE



Appendix A - Centennial Park Master Plan Administrative Draft, June 2020



CENTENNIAL PARK MASTER PLAN

CITY OF VACAVILLE

CENTENNIAL PARK MASTER PLAN

Administrative Draft
June 2020

MIG

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APPENDIX A: Pop-Up Event Survey Results

APPENDIX B: Online Survey Summary Report

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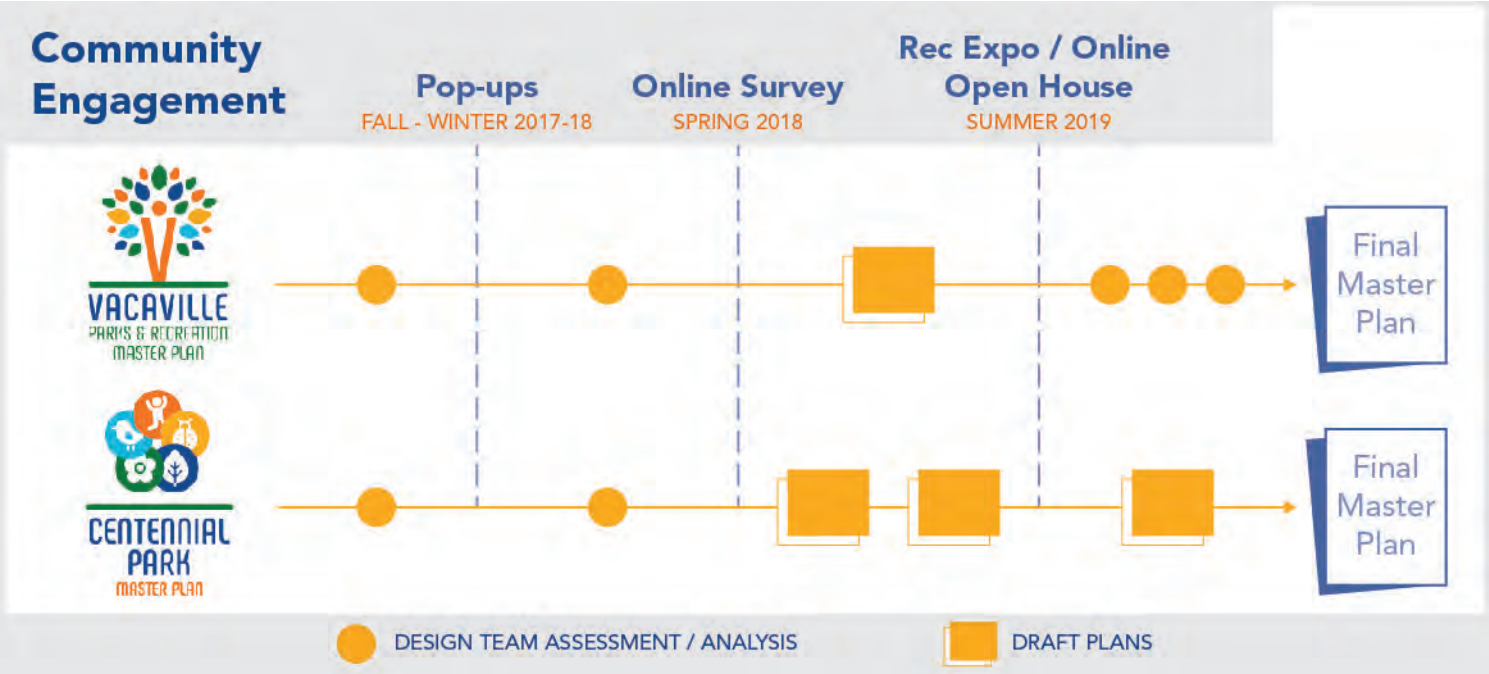
APPENDIX D: Rapid Environmental Constraints Analysis (RECA) Report

Chapter 1:
INTRODUCTION

The Master Planning Process

In 2017, City of Vacaville began two concurrent planning efforts—this Master Plan for Centennial Park and a citywide Park and Recreation Master. A 265-acre community park, Centennial Park is the second largest park in the system. Only about 20% of the site has been developed, which means that Centennial Park is Vacaville's most promising location for new community serving recreation facilities and amenities. Doing both projects concurrently allowed Vacaville to consider broader community needs and the overall vision for citywide parks and recreation services while defining the future of Centennial Park. The City retained design and planning firm MIG, Inc. to lead both efforts.

As shown in the graphic below, these two projects advanced in parallel and relied on shared stakeholder and community engagement efforts.



Community Engagement Overview

The community engagement program was designed to meet the following objectives:

- Increase community awareness of the project
- Build on the results of the 2013 Vacaville Recreation Needs Assessment
- Confirm and build upon the Parks and Recreation policies in the 2015 General Plan
- Offer a range of communication and engagement tools to accommodate residents' interest and preferences
- Gather ideas and input from community members of all ages, abilities, reflecting the diversity of Vacaville's population
- Ensure the final plans reflect community priorities, preferences, and values
- Foster stakeholder and community buy-in to support plan adoption and implementation

To achieve these objectives, the project team employed a multi-layered outreach strategy that included a variety of engagement tools and activities to encourage Vacaville residents and other interested community members to participate in the planning process. Several activities maximized participation by meeting people "where they are"—namely, in parks and recreation centers and at community events. The City promoted engagement opportunities and provided information about the project through its established communications channels, including its website, newsletters, e-blasts, Events Guide and social media accounts.

The following is summary of the methods that were implemented throughout the course of the planning process:

POP-UP ACTIVITIES

From October through December of 2017, MIG and Vacaville Parks and Recreation staff conducted eleven "pop-up" surveys throughout Vacaville to solicit input on the Parks and Recreation Master Plan and the Centennial Park Master Plan. These activities engaged over 500 people in parks, recreation facilities, and at community events throughout the city. The pop-ups provided residents and visitors who otherwise might not participate in the planning process with an opportunity to contribute their ideas and preferences and raised awareness of these projects.

City staff invited people to participate in an interactive exercise in which they answered questions about their current use of Vacaville's parks and recreation system, as well as their hopes for improvements. Participants answered questions by placing "dot" stickers on their preferred choice(s) displayed on poster boards. The exercise included five boards, with one board devoted to collecting information about Centennial Park. This approach engaged all age groups, allowed for informal and educational discussion with the public and provided an opportunity to promote the planning process.

A summary of the survey results from the pop-up events is included in Appendix A.

ONLINE SURVEY

As part of the community engagement process, MIG prepared a survey using Maptionnaire, an online interactive map questionnaire that provides a dynamic way for community members to give feedback about their city's parks and recreation system. Survey participants were able to access the questionnaire online and on their mobile devices. The survey launched on February 20, 2018 and closed on May 7, 2018, at which time there were 589 respondents.

Survey participants were asked to respond to location-specific, multiple-choice, and open-ended questions about Vacaville's city-wide park and recreation system, as well as Centennial Park site-specific questions. Results of the survey, summarized in Appendix B, provide insight about how people use Vacaville's existing parks and recreation system. Including Centennial Park, and what their priorities and needs are for the future.

REC EXPO AND ONLINE OPEN HOUSE

The project team also hosted a table with interactive exercises at the City's Recreation Expo in April 2019 and extended the exercises in an online format in September 2019. Through these exercises, community members were given the opportunity to identify their preferences on the overall character of future parks, identify their top priority parks project, spend a limited parks improvement budget, and provide their overall comments, feedback, or ideas on the parks system. Approximately 30 participants provided feedback at the 2019 Rec Expo and 475 responded online. A summary of the feedback provided is included in Appendix C.



Commission and Council Engagement

In addition to the community and stakeholder engagement activities described above, the project team worked collaboratively with City staff to inform and engage elected and appointed officials throughout the planning process.

AD HOC COMMITTEE

An Ad Hoc Committee, comprised of City staff and members of the Community Services Commission, was tasked with guiding the planning processes. Members of the committee helped shape engagement activities and to facilitate communication with the larger Community Services and Planning Commissions. In the early stages of the planning process, Ad Hoc Committee members worked through the development of recommendations and potential projects, prioritization, and selection of preferred concepts for Centennial Park.

COMMUNITY SERVICES COMMISSION

The project team attended two meetings of the Community Services Commission to review progress, provide feedback, and offer input into the PRMP and CPMP. Members of the Commission weighed in on project goals and objectives, reviewed community input, reviewed draft plans, and approved final plans.

CITY COUNCIL

Throughout the planning process, the project team provided information and updates for City staff to present at City Council touchpoints, including results from community surveys and workshops. In addition, the project team attended one City Council meeting at the end of the process to present the Final Plans for Council Adoption.

Key Findings from the Community Engagement Process

The following key findings from the engagement process were used to inform recommendations for the Master Plan.

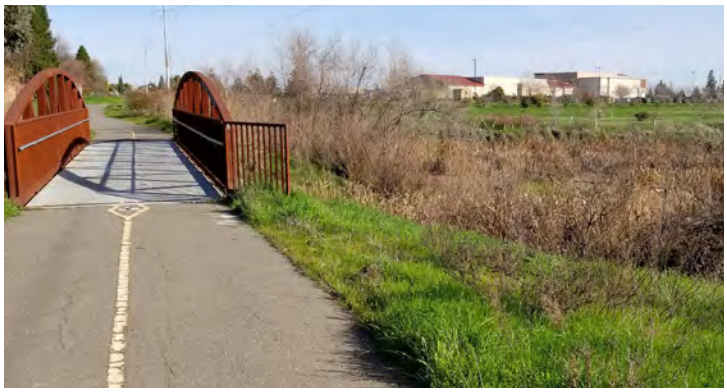
- Many respondents had visited Centennial Park, though most reported to "very rarely" go to the park and noted that it is not near their home.
- Though walking and biking is popular at Centennial Park, most visitors arrive by car.
- Most regular visitors visit Centennial Park to access its trails for running, hiking, dog-walking, or cycling.
- Other, less frequent, visitors primarily visited the park for soccer games or tournaments.
- Respondents indicated that increasing amenities and public awareness of the park would make Centennial Park more attractive .
- Residents prioritized multi-use fields and courts, a recreation center with gymnasium, playgrounds, and restrooms for improvements the park .
- Respondents generally favor an informal, natural park character over highly manicured features.
- The community expressed a desire to increase recreational amenities in Centennial Park while maintaining opportunities to engage with nature and wildlife in a less manicured, informal setting.





Existing Conditions and Site Analysis

Plans for Centennial Park, and the site itself, have evolved over the last 40 years. The south end of the site originally served as a city landfill and wastewater treatment plant. The former landfill is now capped and has development restrictions that limit use on its footprint. Most of the land north of the southern tributary of Horse Creek was historically dry farmed. This area also includes additional tributaries of Horse Creek, wetlands and the old Sacramento Northern Railway.



The name of the park has changed multiple times and there have been several iterations of park master plans. Initial improvements (including a ball field complex and tennis courts) were funded by a voter-approved tax (Measure I) in 1988. Significant underground infrastructure was funded through park development impact fees. Grant funding was used to help pay for creek restoration, tree planting and the development of a paved trail on the old railway.

Centennial Park grew to its current size through acquisitions made by the City's Redevelopment Agency (RDA) that expanded the park to the north. In 1998, RDA approved a development agreement with the Vacaville Youth Soccer League (VYSL) to develop a nine-field soccer complex south of Horse Creek (the southern tributary). RDA and VYSL provided the initial funding for this effort and to date, four soccer fields have been built. With the demise of RDA and the expiration of the 1998 agreement, the City negotiated a new lease agreement with VYSL for their use of the existing four soccer fields, and the possible development of a fifth "interim" field to be located on the west side of the existing complex.



In order to develop a comprehensive understanding of the opportunities and constraints associated with future development of Centennial Park, the project team reviewed a range of technical reports and historical planning documents provided by the City. In addition, the team conducted site visits with City staff to gain familiarity and visually assess existing park conditions

The team also conducted an environmental assessment and analysis of Centennial Park. This assessment identified environmental issues related to sensitive species and habitats in and around the park, and specified additional studies and permits required for site development. The results of this analysis are included in Appendix D. information gleaned from the site analysis is summarized in the Existing Conditions and Opportunities and Constraints diagrams that follow.

Existing Conditions Photos











DIAGRAM

Existing Conditions



EXISTING CONDITIONS



DFILL
EA (projected)
N AREA
REA (projected)
minimum setback)
H CANAL (barrier)

- BIRD BOX AREA (21 boxes)
- GATE
- RESTROOM
- CULVERT
- DIRECTION OF SLOPE
- POINT OF INTEREST (interpretive experience, view, bench)

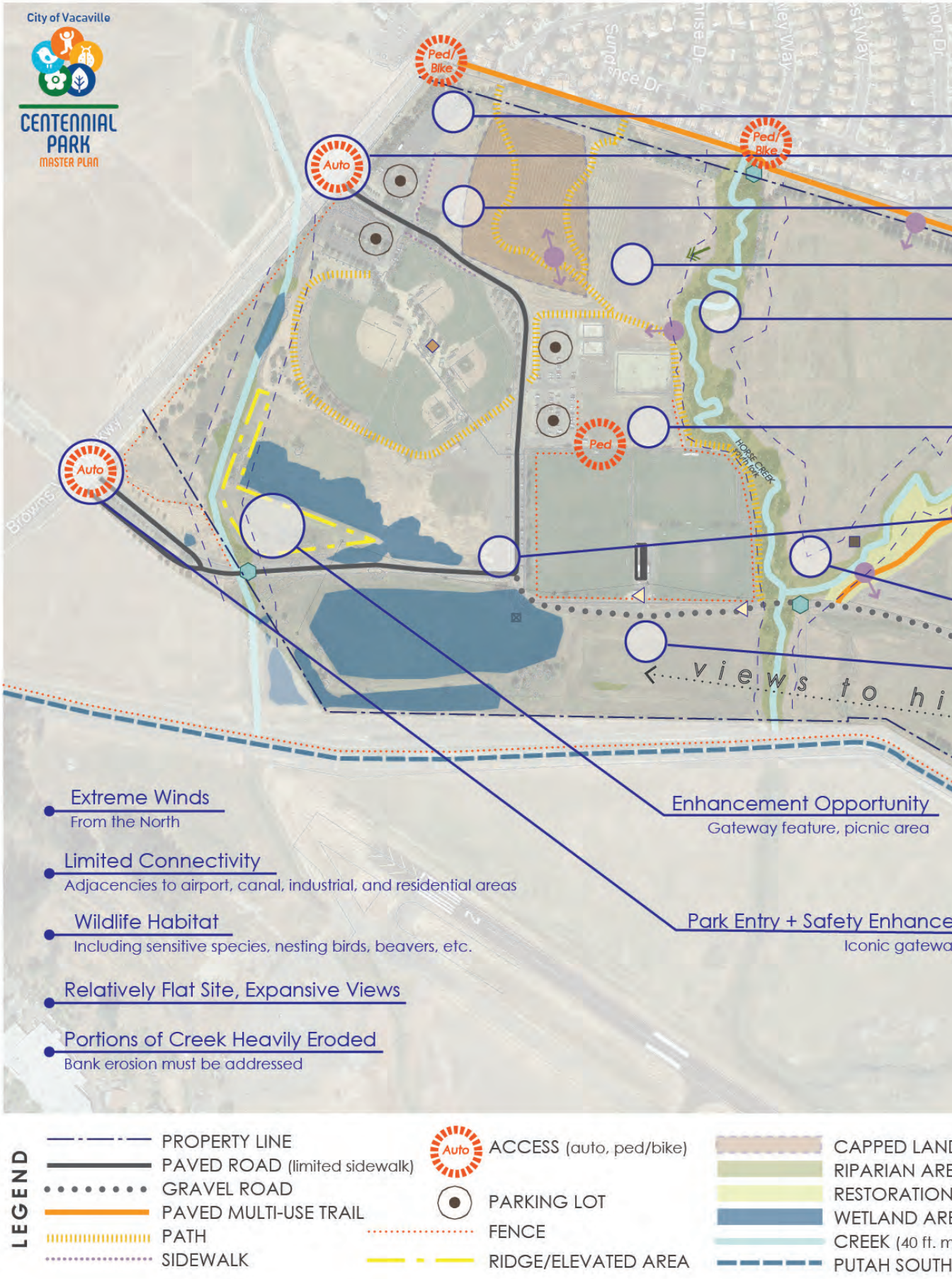
0 1/8 mile 1/4 mile

0' 400' 800' 1200'

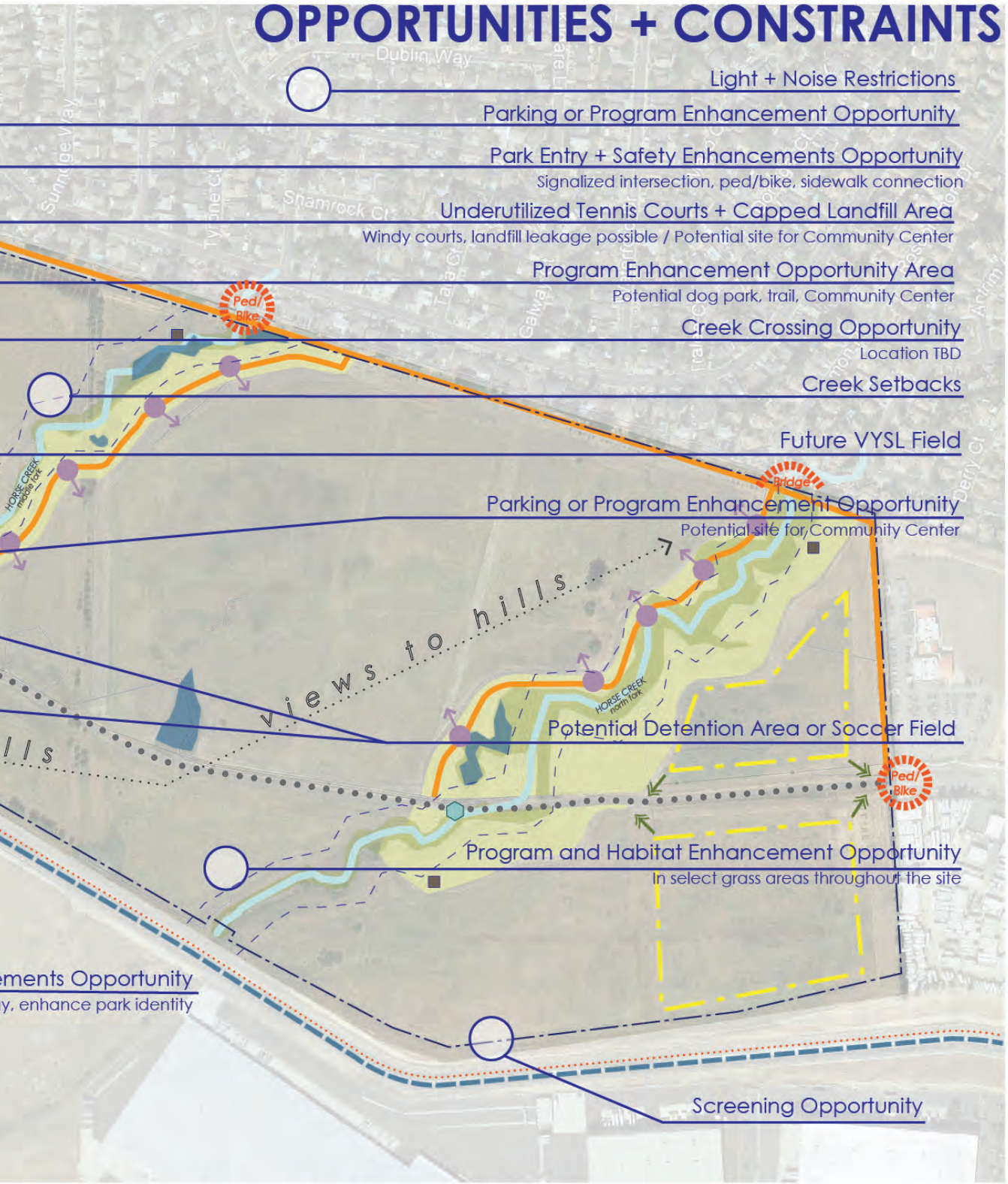
NORTH

DIAGRAM

Opportunities and Constraints



OPPORTUNITIES + CONSTRAINTS



Chapter 2:

THE VISION FOR CENTENNIAL PARK

Centennial Park as a Community Park

The Parks and Recreation Element of Vacaville's General Plan defines a community park as follows:

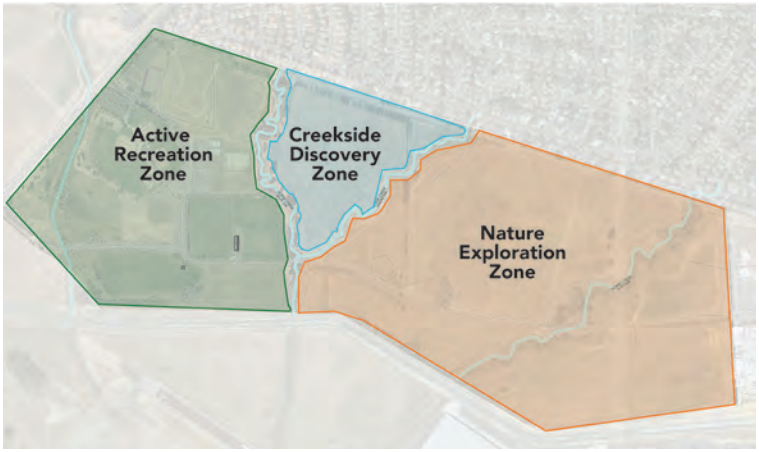
> *Mid-sized parks designed to provide major active-use recreational facilities such as lighted sports fields, sport courts, community buildings, swimming pools, spaces for community festivals, civic events, organized sports, and athletic competitions. Community parks should ideally also include areas for passive recreation including walking paths with benches, shaded picnic areas, and preserved or created natural areas such as creeks, habitat areas, and unique landforms. Community parks often include appropriate support facilities such as parking areas, restroom buildings, and concession stands. Community parks generally range in size from 12 to 60 acres and are intended to serve the population living within a 1½-mile radius. A community park can also function as a neighborhood park for nearby residential areas.*

Given Centennial Park's 265 acres, it is much larger than the "typical" community park and has potential to also serve some of the same functions as Lagoon Valley Park, a much-loved regional park that is located in the southern portion of Vacaville. For these reasons, the project team identified Centennial Park as an important location to meet the need for more trails and connections to nature, while sustaining its existing recreation activities and fulfilling its community park function.

Based on community engagement results, the project team identified the vision for Centennial Park as **a place to play, gather, connect with nature, and preserve habitat.**

The analysis of existing conditions and opportunities and constraints led the project team to define three distinct use zones. These use zones respond to the site, reflect the community's feedback about the need for more trails and connections to nature in Vacaville, provide a transition from the developed area of the park to the restored areas.

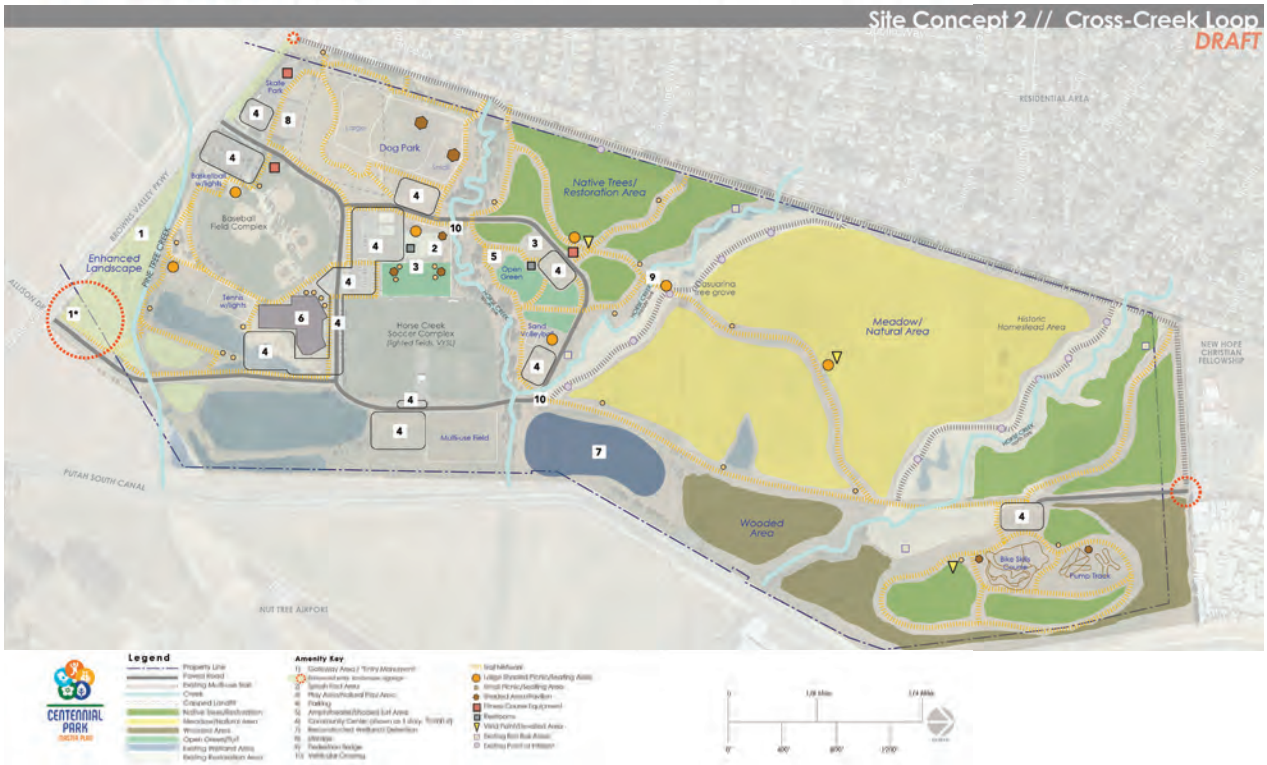
The Active Recreation Zone, Creekside Discovery Zone and Nature Exploration Zone, as illustrated and further described in the following diagram, are characterized by the type and intensity of use that the site is able to support. These use zones were the basis for concept development and can be used to inform future decisions about locating facilities in the park.



Alternative Concept Plans

In order to incorporate the potential program elements associated with each of the Park Use Zones while addressing the opportunities and constraints of the site, the project team prepared two conceptual approaches to the future development of Centennial Park. These concepts were referred to as the "Cross-Creek Loop" approach (Concept 1) and the "Active-Hub" approach (Concept 2). Upon review of these concepts, the Ad-Hoc Committee elected to combine desirable features of each of the approaches into a single Preferred Master Plan.





Preferred Master Plan

The preferred Master Plan combined elements from both alternatives, expressing the vision for Centennial Park as a place **to play, gather, connect with nature, and preserve habitat.**

The illustrative Master Plan on page 20 shows the full buildout of Centennial Park, organized by the three use zones. The parking and circulation diagram on page 22 shows the careful orchestration of site circulation for pedestrians, bicyclists, motor vehicles and maintenance vehicles on the site, considering natural resources and minimizing user conflicts. This diagram shows the route for 5K events, an important activity. It also includes parking counts for visitor motor vehicles in permanent parking lots. For occasional large scale events, temporary or overflow parking may be used.

Overview of Centennial Park

In order to achieve this vision, visitors will be welcomed into the park from the main entry located at the intersection of Browns Valley Parkway and Allison Drive with improved and enhanced signage and landscaping, safe and comfortable pedestrian and bike paths and ample accessible parking areas distributed throughout the site.

Anchoring the Active Recreation Zone at the south end of the park will be a new full-service Community Recreation Center that will be sited and designed to provide both physical and visual connections to the scenic wetland areas located along the southeast corner of the property. This new community asset will include comfortable and inviting spaces for hosting events and meetings as well as state-of-the-art sports and fitness facilities. Community members will enjoy spending time relaxing and watching wildlife or small planes landing at the nearby Nut Tree Airport from the graciously sized decks that overlook the wetlands. Those who desire a closer view of the birds and wildlife that frequent the park will enjoy strolling around the wetlands on two new boardwalk loop trails that will be easily accessible from the Community Recreation Center.



The Wetlands

Additional amenities of the Active Recreation Zone will include an expansive dog park with an agility course and separate amenities for large and small dogs, lighted basketball and tennis/pickleball courts with adjacent picnic facilities and a skate park with shaded seating for skaters and spectators.

A large group picnic shelter and multi-purpose lawn at the center of the Active Recreation Zone will provide ample open space for events and informal performances. Nearby, children of all ages will enjoy spending time cooling off in a wetland-themed splash pad play area that will be both physically and visually engaging with the addition of art and ornamental plantings. The community's use of these amenities will be enhanced by the provision of a new restroom building and several reservable picnic shelters.

A new bridge and park access road spanning the south tributary of Horse Creek will allow visitors to easily transition from the Active Recreation Zone into the Creekside Discovery Zone. This zone of the park is intended to enhance community enjoyment of the existing riparian corridor with a clearly delineated trail system and informal picnic areas located immediately adjacent to Horse Creek.



Splash Pad

At the heart of the Creekside Discovery Zone, the park's youngest visitors will be encouraged to experience the wonder of the park's natural features and wild inhabitants through play. In addition to swinging, climbing and sliding, children will have the opportunity to build lodges and dams that mirror the creations of beavers, one of the park's most industrious resident species. Interpretive experiences along a small discovery loop trail will prompt young children and their parents to take notice of the sights and sounds of the creek environs that surround them.

Two large group picnic shelters located to the east and west of the nature playscape will allow for fun-filled gatherings that will be further enhanced by easy access to sand volleyball courts and open lawn areas for informal games and relaxation. A combined restroom and welcome kiosk will support the community's comfortable use of the nature playscape and picnic facilities.



Nature Playscape

The north side of the park access road will be abuzz with pollinators visiting the colorful blooms that will abound in the native garden. The gardens will provide a welcoming entry experience for a new open-air event pavilion that will serve as an ideal setting for informal weddings and community gatherings. To the northwest of the pavilion, a sloping lawn will provide space for casual guest seating and picnicking. Forming the backdrop to the lawn, an orchard of ornamental fruit and nut trees will recall the agricultural heritage of Vacaville. Tucked within the orchard, visitors will be delighted to happen upon a couple of small clearings in which rustic swings will invite relaxation and quiet contemplation.

Visitors may access the Nature Exploration Zone of the park on foot or by bike via the trail system from the south or they may choose to use the secondary north vehicular entrance located at the end of Allison Parkway. The central section of the Nature Exploration Zone will be dedicated to passive exploration of the restored native habitat and informal picnic areas that will be sited to allow visitors to take in the scenic views of the mountains beyond. At the northeast corner of the park, a new bike skills course will provide opportunities for community members to hone their mastery of two-wheels.

Throughout the park, native plant species will be re-introduced to the landscape to improve environmental quality and enhance wildlife habitat while simultaneously creating diverse settings for community enjoyment and exploration.

A more detailed description of each of the Park Use Zones and related amenities is presented in the following chapters of the report.



Event Pavilion

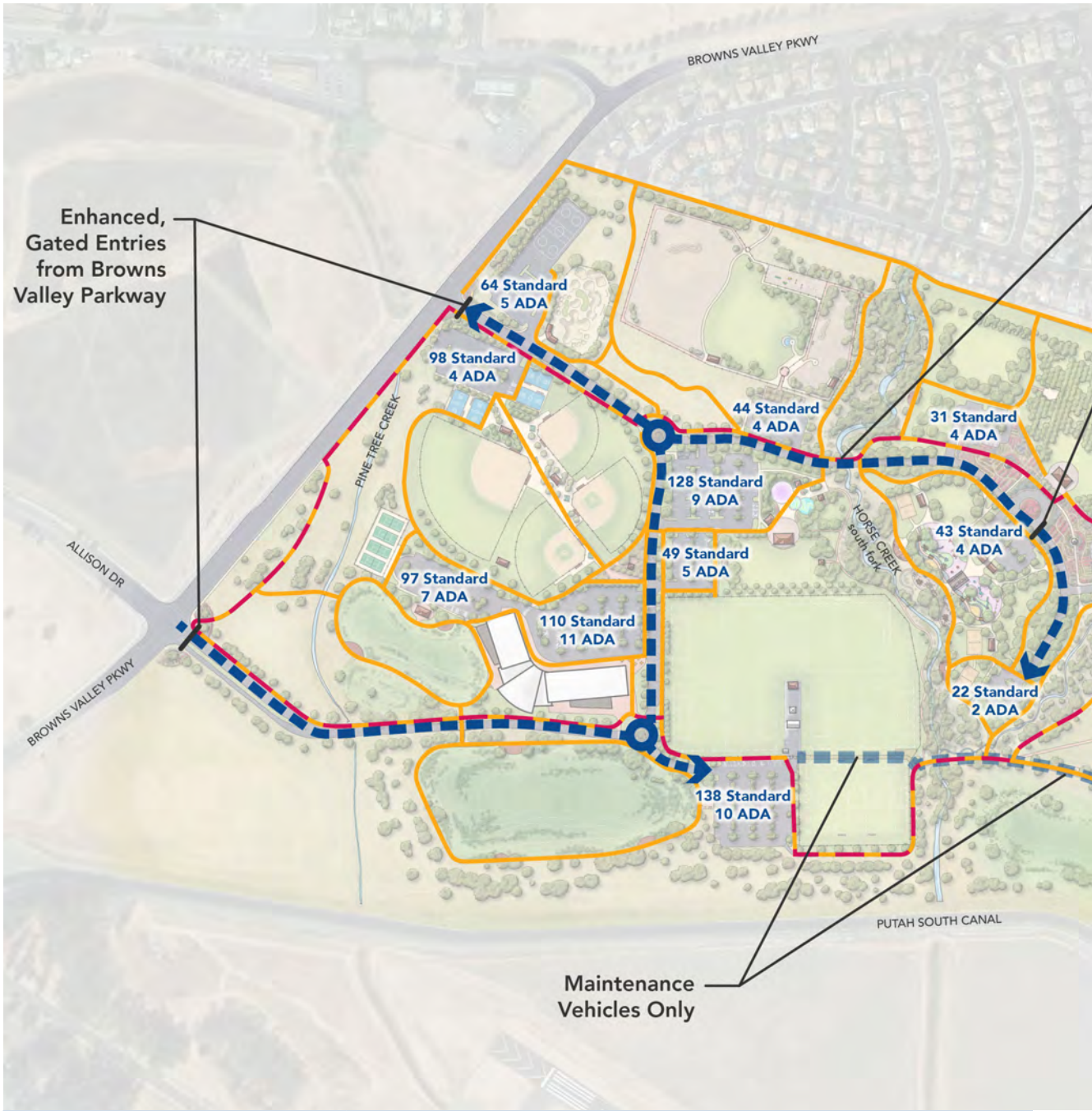
Master Plan


Dog Park
Skate Park
Splash Pad and Central Lawn
Gated Entry
4 Lighted Basketball Courts
4 Tennis Courts (lighted) with Pickleball Striping
5K Race Loop (Typ.)
Enhanced Gated Entry
Cut Steep Slope along Frontage and Soften with Grade Variation and Native Plantings
The Wetlands
Pedestrian Underpass
Perimeter Trail
Community Recreation Center and Cafe / Seating Area
Vacaville Youth Soccer League Complex
Drop-Off Area
Maintenance Road and Yard (Location TBD)
Meadow / Natural Area
Restored Riparian Corridor
Woodlands with Integrated Trail System
Bike Skills Course
BROWNS VALLEY PKWY
ALLISON DR
PINE TREE CREEK
EXISTING BALLFIELDS
HORSE CREEK south fork
EXISTING HORSE CREEK SOCCER COMPLEX
PUTAH SOUTH CANAL
NUT TREE AIRPORT


Habitat Restoration Zone, Trails, and Creek Overlook
Event Pavilion, Community Orchard, and Gardens
Nature Playscape
Group Picnic Area
Concrete Sidewalk (Typ.)
Elevated Observation Point
Soft Surface Trail (Typ.)
12′ Asphalt Multi-Use Trail
Group Picnic Area
HORSE CREEK middle fork
HORSE CREEK north fork
NEW HOPE CHRISTIAN FELLOWSHIP
ALLISON PKWY
Controlled Entry
0 100′ 200′ 400′
NORTH

DIAGRAM

Parking and Circulation



	Existing vs. Proposed Parking Quantities		
	Standard Stalls	ADA Compliant Stalls	TOTAL
EXISTING	364	16	380
PROPOSED	900	73	**973**


Vehicular Circulation
Primary Pedestrian and Bike Circulation (Paved)
5K Run Route
Standard
ADA
Parking Lot Quantities - Standard and ADA Compliant Stalls
New Bridge at Horse Creek
Gate for Temporary Road Closures
HORSE CREEK middle fork
31 Standard
4 ADA
HORSE CREEK north fork
NEW HOPE CHRISTIAN FELLOWSHIP
LLISON PKWY
45 Standard
4 ADA
New Gated Entry
0
100'
200'
400'
NORTH

Chapter 3:

THE ACTIVE RECREATION ZONE

Zone Overview

The Active Recreation Zone, bounded to the south by Browns Valley Parkway and to the north by Horse Creek, encompasses the existing developed features of the park and provides many new and improved recreational opportunities. Public access to these facilities is supported by enhanced vehicular, pedestrian and bicycle circulation and additional parking capacity.



COMMUNITY RECREATION CENTER

Anchoring the Active Recreation Zone at the south end of the park will be a new full-service Community Recreation Center that will be sited and designed to provide both physical and visual connections to the scenic wetland areas located along the southeast corner of the property. This new community asset will include comfortable and inviting spaces for hosting events and meetings as well as state-of-the-art sports, fitness and childcare facilities. Some community members may enjoy spending time relaxing and watching wildlife or small planes landing at the nearby Nut Tree Airport from the graciously sized decks that overlook the wetlands. This master plan includes a proposed building program for the center, based on current trends in facility design. When Vacaville moves forward with the design of the center, this effort should include a market and feasibility study that finalizes the building program based on the City's desired operational parameters.

Exterior amenities will include comfortable plaza spaces with ample room for curb-side passenger drop-off. Designated zones with tables for outdoor dining and space for food-trucks and other temporary vendors will also be incorporated.



THE WETLANDS

Those who desire a closer view of the birds and wildlife that frequent the park will enjoy strolling around the wetlands on two new boardwalk loop trails (1/2 mile and ¼ mile distance) that will be easily accessible from the Community Recreation Center and connected across Allison Road by a pedestrian underpass. Further amenities of the wetland trails will include interpretive signage, wildlife viewing areas and a large picnic shelter. Trailhead parking and access to the ½ mile wetland loop will be provided at the north end of the trail.



Community Recreation Center



Splash Pad and Central Lawn

SPLASH PAD AND CENTRAL LAWN AREA

A large group picnic shelter and multi-purpose lawn at the center of the Active Recreation Zone will provide ample open space for events and informal performances. Nearby, children of all ages will enjoy spending time cooling off in a wetland-themed splash pad play area that will be both physically and visually engaging with the addition of art and ornamental plantings. The community's use of these amenities will be enhanced by the provision of a new restroom building and several reservable picnic shelters.





DOG PARK

A new dog park, located on the site of the capped landfill, will include controlled and designated spaces for the safe separation of large and small dogs. Varied terrain including areas of soft-pavement and turfgrass will provide durable settings for canine exercise and socialization, while an agility course and water-play area will further enrich the experience. Support infrastructure, including dog-washing and watering stations, hand-washing stations and waste management receptacles will help to maintain healthy and sanitary conditions for pets and owners alike.



SKATE PARK

A new skate park will be developed on the site of the park's existing tennis courts. The skate park will be a permanent, state of the art concrete skate park with varying difficulty levels. Shaded seating will be provided to serve both skaters and spectators. A reservable picnic shelter will be located adjacent to the skate park to accommodate group gatherings and celebrations.



Dog Park and Skate Park



SPORTS COMPLEX

The park's four existing baseball fields (three youth and one full-sized), roller-hockey court, restroom and concession building will remain in place and be upgraded. The Sports Complex will be expanded with the addition of four new lighted basketball courts, the use of which will be enhanced with an adjacent picnic shelter. The existing tennis courts will be removed and replaced south of the baseball fields with four lighted dual-purpose tennis/pickleball courts.



Sports Complex

HORSE CREEK SOCCER COMPLEX

One of the features of the park that will remain in place is the existing Horse Creek Soccer Complex, operated by Vacaville Youth Soccer League (VYSL). The current four-field complex will be expanded to the east with the development of an additional full-sized field and support facilities including additional parking, a passenger drop-off area, restroom building and concession stand. The complex will be fenced and screened with new plantings.





Detailed Programmatic Element Components

Programmatic Element	Physical Components	Infrastructure
COMMUNITY RECREATION CENTER (3 Acres of Building/Site)	**INTERIOR** • 75,000 SF Community Recreation Center Building, Final Program To Be Determined with Feasibility Study • Lobby o Information/Registration Desk o Comfortable Seating o Vending/Concession Area Accessible from the Patio • Multi-Use Gymnasium o Hardwood floor o 4 full sized basketball courts o One half court for basketball and volleyball o Space for spectators and storage • Indoor Sport Courts o 2 indoor soccer fields - optional o 2 racquetball courts - optional • Dance/Fitness Studio (s) o Bars o Mirrors o Storage for fitness equipment • Fitness Area o Free Weights, Cardio, Resistance and Circuit Training Equipment o Spinning Room o Indoor Track • Climbing Wall • Locker Rooms with Showers • Flexible Event Space o 6,000 total SF (Four 1,500 SF partitions) o Total Capacity: 300 people seated banquet style/400 people seated theater style o Capacity per Partition: 75 people seated banquet style/100 people seated theater style o Adjustable lighting with dimmer switches o Audio / visual equipment o Automated retractable projection screens in the front of each section o Fully equipped catering kitchen o Hardwood dance floor o Small wet bar in the back of each section o Large windows to provide natural light/views o Wrap-around outdoor patio with seating and access/views to wetlands • Meeting/Activity Rooms (4) o Capacity: 30 people theater style/20 people with tables and chairs o 625 SF (25' x 25') o Audio / Visual Equipment o Sink/Countertop • Restrooms for Event/Meeting Spaces • Childcare Facility (Approximate Area) o 10,000 SF Interior Space o 4,500 SF Exterior Space for preschool o 3,800 SF Exterior Space for infant/toddlers o 600 SF Exterior Space for staff o Restrooms • Administrative Offices o 2000 SF • Storage Areas o 1500 SF • Service Entrance *continued on next page*	• Sewer • Water • Electrical • Gas • Storm Drainage • Irrigation • Security • HVAC • Communications

Programmatic Element	Physical Components	Infrastructure
COMMUNITY RECREATION CENTER (3 Acres of Building/Site)	*continued from previous page* **EXTERIOR** • Front and Rear Plazas at Entryways • Outdoor Gathering Area Adjacent to Event Space • Vehicular Drop-off at Entry • Fire Access • 300 Vehicular Parking Spaces (or as required per code) • Designated Space for Vending/Food Trucks • Bike Parking Area • Service/Delivery Entrance • Shade Structures and Comfortable Furnishings at Plazas • Ornamental Plantings • Lighting	*see previous page*
THE WETLANDS (18 Acres)	• 2 ADA Accessible Boardwalk Loop Trails (~ ½ mile and ¼ mile) • Wildlife Viewing Platforms with Benches • Large Picnic Shelter at Loop Trail • Wayfinding and Interpretive Signage • Wetland Restoration Plantings • Easily Accessible and Visible from Community Center Event Space to Support Indoor/Outdoor Entertaining • Trailhead at Eastern Parking Lot	--
SPLASH PAD AND CENTRAL LAWN AREA (3.5 Acres)	• In-ground Splash Fountain Features Designed to Recall Vernal Pools • Seat Walls with Mosaic Elements • Enhanced Paving • Wetland Themed Art/Sculpture • Ornamental Plantings • Informational and Interpretive Signage • Small Picnic Shelters (2) at Splash Pad – Sized to Shade (2) 8' Tables • Small Picnic Shelters (2) at Central Lawn – Sized to Shade (2) 8' Tables • Large Picnic Shelter/Stage at Central Lawn – Sized to Shade (10) 8' Tables • Restroom Building (sized per State and Local Code Requirements) • Central Lawn Area • Shade Trees • Screen Plantings at Soccer Complex Fence • Bike Parking Area	• Sewer • Water • Electrical • Storm Drainage • Irrigation • Lighting • Water Filtration and Recirculation System (or as Required by State and Local Code)
DOG PARK (5.5 Acres)	• Staging Plaza • Controlled Entry Area with Separate Gates for Small and Large Dogs • Fully Fenced Enclosures • Small Dog Exercise Zone with Large Shade Structure • Large Dog Exercise Zone with Large Shade Structure • Agility Training Area • Decomposed Granite Trail • Canine Play Equipment • Canine Water Play Area • Turf with Paving in High Traffic Areas • Trees • Varied Terrain/Mounds • Dog Washing Station with Concrete Pad and Drainage • Dog Watering Station • Benches • Fencing • Lighting • Dog Waste Receptacles with Baggie Dispensers • Informational Signage with Public Posting Board • Hand-Washing Station	• Sewer • Water • Electrical • Storm Drainage • Irrigation

Programmatic Element	Physical Components	Infrastructure
SKATE PARK (1 Acre)	• Permanent Concrete Skate Features • Viewing Area • Shade Structures for Skaters and Spectators • Reservable Medium Picnic Shelter for Parties - Sized to Shade (4) 8' Tables • Tables and Benches • Trash and Recycling Receptacles – Located to Accommodate Recology Truck Access • Ornamental Planting	• Perimeter Fencing • Lighting • Irrigation
SPORTS COMPLEX (12.5 Acres)	• Existing Baseball Fields to Remain (4) • Existing Restroom to Remain at Baseball Complex • Existing Roller Hockey Court to Remain • New Lighted Tennis/Pickleball Courts (4) • New Lighted Basketball Courts (4) • Fencing at New Courts • Medium Picnic Shelter at Basketball Courts – Sized to Shade (4) 8' Tables • Centrally Located Pedestrian Plaza • Bike Parking Area	• Consider Lighting One Additional Baseball Field • Electrical • Storm Drainage • Irrigation • Wifi/Data/Security
VACAVILLE YOUTH SOCCER LEAGUE COMPLEX (12.5 Acres)	• Existing VYSL Soccer Field to Remain (2 of 4 are Lighted) • New Full-Sized, Permanent Field with Additional Parking, Passenger Drop-Off Area, Restroom Building and Concession Stand • Note: Interim VYSL Soccer Field (U-10) to be Located on West Side with Additional Parking • Fencing to Enclose VYSL Complex • Screen Plantings at Fence Line	• Electrical • Storm Drainage • Irrigation • Sewer • Water • Wi-fi/Security

Chapter 4:

THE CREEKSIDE DISCOVERY ZONE

Zone Overview

A new bridge and park access road spanning the south tributary of Horse Creek will allow visitors to easily transition from the Active Recreation Zone into the Creekside Discovery Zone. This zone of the park is intended to enhance community enjoyment of the existing riparian corridor with a clearly delineated trail system and informal picnic areas located immediately adjacent to Horse Creek.



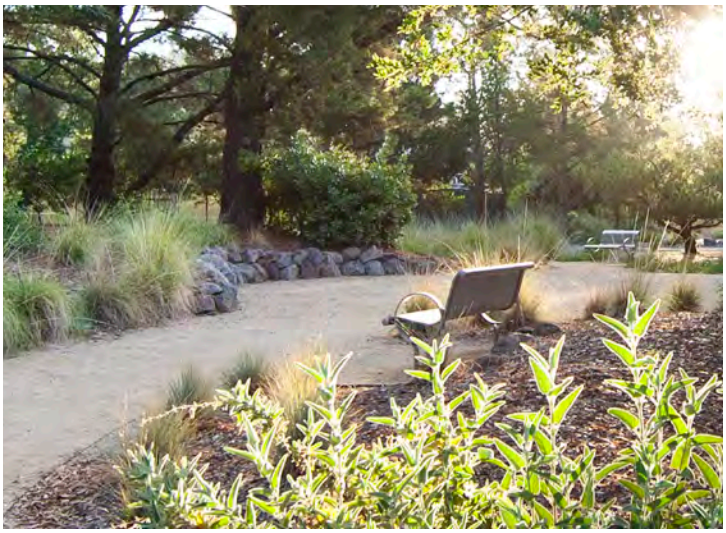


CREEKSIDE TRAILS, OVERLOOKS AND HABITAT RESTORATION AREAS

Within the Creekside Discovery Zone, several habitat areas will be restored with native plant species. These restoration areas encompass Oak Woodlands, Oak Forests and Riparian Corridors along both the south and middle forks of Horse Creek. Amenities for passive recreation in these areas will include trails, creek overlooks, benches, picnic tables and interpretive signage located to minimize impacts on the restored habitat while providing opportunities for park visitors to spend time in nature.

GROUP PICNIC AREA

The Group Picnic Area will draw visitors to the central portion of the Creekside Discovery Zone. Three group picnic shelters and adjacent sand volleyball courts will set the scene for memorable community gatherings and celebrations. Open lawn areas punctuated with shade trees and benches will welcome visitors to enjoy passive recreation and informal games. A combined information kiosk and restroom building will also include outdoor sinks for convenient post-picnic cleanup.



NATURE PLAYSCAPE

At the heart of the Creekside Discovery Zone, the park's youngest visitors will be encouraged to experience the wonder of the park's natural features and wild inhabitants through play. In addition to swinging, climbing and sliding, children will have the opportunity to build lodges and dams that mirror the creations of beavers, one of the park's most industrious resident species. Interpretive experiences along a small discovery loop trail will prompt young children and their parents to take notice of the sights and sounds of the creek environs that surround them.







EVENT PAVILION, COMMUNITY ORCHARD AND POLLINATOR GARDEN

Located northwest of the new Park Access Road, visitors will discover a special setting that speaks to the unique history of Vacaville and the land that is now Centennial Park. A newly planted orchard of ornamental fruit and nut trees will provide a scenic backdrop for an outdoor event pavilion that will be designed to host community concerts, special events and meaningful celebrations including weddings and reunions.

Sized to accommodate approximately 1,000 spectators informally seated in the lawn for concerts or outdoor movies or 200 guests for a formal dinner reception, the event pavilion will soon become a favorite venue for community gatherings. Support facilities for the pavilion will include a passenger drop-off area, event staging access, restrooms, private dressing space and food preparation areas.



Even when not in use for events, park visitors will enjoy strolling through the ornamental pollinator garden that surrounds the event pavilion's entryway or a moment of relaxation swaying in a porch swing surrounded by trees in the community orchard.



Event Pavilion, Orchard, and Gardens

Detailed Programmatic Element Components

Programmatic Element	Physical Components	Infrastructure
GROUP PICNIC AREA (4 Acres)	• Medium Picnic Shelters (3) – Sized to Shade (4) 8' Tables • Sand Volleyball Courts (3) • Restroom Building/Information Kiosk • Open Lawn Areas • Shade Trees • Benches • Trails at Creekside • Picnic Tables at Creekside • Trash and Recycling Receptacles – Located for Recology truck access • Bike Parking Area	• Sewer • Water • Electrical • Storm Drainage • Irrigation • Lighting
NATURE PLAYSCAPE (2 Acres)	• Central Shade Pergola with Benches (6) • Older Children's Play Area (5-12+ year olds) • Younger Children's Play Area (2-5 year olds) • Mounded Landforms • Swings • Custom Climbing Towers • Spinning Play Elements • Hillside Slides and Tunnels • Play Stream • Sand and Water Play Area • Custom Beaver Den and Lodge Play Area • Nature Play Elements • Creekside Discovery Path • Interactive Interpretive Features • Loose Parts for Nature Play • Play Area Safety Surfacing (Synthetic or Wood Fiber) • Shade Trees • Non-Toxic Ornamental Plantings with Stimulating Sensory Qualities (Color, Texture, Sound etc.) and Elements that are Safe to Harvest for Play (Seed Heads, Berries, Leaves etc.) • Benches • Trash and Recycling Receptacles - Located to Allow for Recology Truck Access	• Water • Electrical • Storm Drainage • Irrigation • Water Filtration and Recirculation System for Play Stream • Wifi/Security
EVENT PAVILION, COMMUNITY ORCHARD AND POLLINATOR GARDEN (9.5 Acres)	• Large Pavilion/Picnic Shelter – Sized to Accommodate ~ 200 People Seated for Dining • Raised Platform with Shade Elements to Create Informal Stage or Dance Floor • Lawn Seating Area – Sized to Accommodate ~ 1000 People Seated on Blankets or Camp Chairs for Concerts or Movies • Circular Drive for Loading/ Passenger Drop-Off • Orchard Planting with Ornamental Fruit and/or Nut Trees • Clearings in Orchard with Rustic Porch Swings • Native Pollinator Garden at Entry to Event Pavilion – Maintain Distance from Food Preparation and Dining Areas • Trail Connections to Creek Corridors • Trash and Recycling Receptacles – Located to Allow for Recology Truck Access • Benches • Grills • Sink/Counter for Food Preparation and Cleanup • Restrooms • Private Dressing and Preparation Area for Weddings and Events	• Sewer • Water • Electrical • Storm Drainage • Irrigation • Lighting for Evening Events • Wifi/Data/Security
CREEKSIDE TRAILS, OVERLOOKS AND HABITAT RESTORATION AREAS (20 Acres)	• New Footbridge Across the South Fork of Horse Creek • Creek Overlooks Along the South and Middle Forks of Horse Creek (2) • Restoration Planting for the Following Zones: Oak Woodland, Oak Forest, and Riparian Buffer • Informational and Interpretive Signage • Trash and Recycling Receptacles – Located for Recology Truck Access • Benches and Picnic Tables • Protective Barriers for Plant Establishment	• Plant Establishment Irrigation Where Necessary

Chapter 5:

THE NATURE EXPLORATION ZONE

Zone Overview

Accessible to pedestrians and cyclists from the south and vehicles from the north, improvements in the Nature Exploration Zone will focus largely on restoring Oak Woodland, Native California Grassland, Oak Forest, Riparian Buffer and Wetland habitat with native plant species. Amenities for passive recreation in this zone will include the development of new soft-surface trail segments that create loops, outdoor fitness stations located along the existing 12' wide paved maintenance trail, overlooks along the north fork of Horse Creek and several group picnic shelters.



BIKE SKILLS COURSE

A bike skills course consisting of natural surface cycling terrain will be located in the northeast corner of the park. The course will be designed to incorporate routes with a range of difficulty levels to challenge both novice and experienced cyclists. Support facilities will include a restroom building, spectator seating and group picnic shelters. A new vehicular entryway at Allison Drive will allow visitors to access a small parking area located in close proximity to the developed features of the Nature Exploration Zone.







Detailed Programmatic Element Components

Programmatic Element	Physical Components	Infrastructure
HABITAT RESTORATION ZONES, TRAILS AND PICNIC AREAS (115 Acres)	• 12′ Wide Paved Multi-Use / Maintenance Trail (1 mile) • Outdoor Fitness Stations Along Multi-Use Trail • Medium Group Picnic Shelter at the North Fork of Horse Creek – Sized to Shade (4) 8′ Picnic Tables • Small Picnic Shelters Along Trail (2) – Sized to Shade (2) 8′ Picnic Tables • Creek Overlooks Along the North Fork of Horse Creek (2) • Restoration Planting for the Following Zones: • Oak Woodland • Native California Grassland • Oak Forest • Riparian Buffer • Wetland • Informational and Interpretive Signage • Trash and Recycling Receptacles – Located to Accommodate Recology Truck Access • Benches and Picnic Tables • Protective Barriers for Plant Establishment	• Plant Establishment Irrigation Where Necessary
BIKE SKILLS COURSE (30 Acres)	• Medium Picnic Shelters (1) – Sized to Shade (4) 8′ Tables • Small Picnic Shelter (1) – Sized to Shade (2) 8′ Tables • Spectator Seating • Natural Surface Cycling Terrain • Multiple Routes Identified by Difficulty Level • Bike Parking Area • Informational Signage • Buffer/Screen Planting • Trash and Recycling Receptacles – Located to Accommodate Recology Truck Access • Restrooms	• Sewer • Water • Electrical • Storm Drainage • Irrigation • Lighting • Wifi/Data/Security

Plant Palette

OAK WOODLAND + FOREST









Quercus agrifolia
Coast Live Oak



Aesculus californica
California Buckeye



Heteromeles arbutifolia
Toyon







Frangula (Rhamnus) californica
California Coffeeberry



Baccharis pilularis
Coyote Brush

NATIVE CALIFORNIA GRASSLAND



Eschscholzia californica
California Poppy



Hordeum californicum
Meadow Barley



Stipa pulchra
Purple Needle Grass



Lupinus bicolor
Bicolored Lupine



Festuca microstachys
Small Fescue

WETLANDS



Eleocharis macrostachya
Spike Rush



Deschampsia danthonioides
Annual Hairgrass



Carex praegracilis
Clustered Field Sedge



Juncus effusus
Common Bog Rush



Juncus patens
Spreading Rush

RIPARIAN BUFFER



Quercus lobata
Valley Oak



Platanus racemosa
California Sycamore



Fraxinus latifolia
Oregon Ash







Sambucus nigra
Black Elderberry



Cercis occidentalis
Western Redbud

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Chapter 6:

PHASING AND IMPLEMENTATION

Overview

This chapter contains order of magnitude costs and a phasing plan.

Planning Level Costs

This Master Plan presents the vision for the full buildout of Centennial Park, an effort that will take many years and depend on funding. The Master Plan is designed so that the various components within
the zones can proceed independently of each other. This approach means that the park will continue to function successfully even if any one element is not implemented and will allow Vacaville can take advantage of funding as it is available.

The table below presents order of magnitude costs for planning purposes. As these costs indicate, implementing improvements at Centennial Park will require multiple funding sources and phasing.

Area	Cost Basis (Included Soft Costs)	Planning Level Cost
Active Recreation Zone	60 acres @ $715,000 per acre	$43,000,000
Creekside Discovery Zone	30 acres @ $715,000 per acre	$21,450,000
Nature Exploration Zone	140 acres @ $50,000 per acre	$7,000,000
	TOTAL:	**$71,450,000**
Community Recreation Center	70,000 SF @ $800 per SF	$56,000,000

LEGAL AND TECHNICAL INVESTIGATIONS TO SUPPORT PERMITTING

Prior to undertaking improvements at Centennial Park, the following legal and technical investigations should be completed for the entire park, with more detailed focus on the Active Recreation and Creekside Discovery Zones, in order to ensure the suitability of site improvement placement and appropriate mitigation measures:

- Boundary Survey (of the entire site)
- Aerial Survey including Utility Locations
- Soils Conditions Study
- Wetland Delineation Survey
- Stormwater Management/Detention Plan
- Ecological Assessment/Environmental Impact Study per CEQA Requirements

Improvements at Centennial Park will be approached in phases, starting with permitting. Once permits are in place and plans approved, site work will be phased according to funding availability and balanced with other project priorities identified in the Parks and Recreation Master Plan.

Phasing Plan

The phasing plan looks at 5-year, 10-year and 15+-year timeframes, looking at infrastructure improvements, habitat restoration, and recreational amenities and sequencing them over time based on known funding sources and PRMP priorities.

	Phase 1 5-year Horizon	Phase 2 10-year Horizon	Phase 3 15-year Horizon
Infrastructure	Park-Wide • Site Investigation and Delineation • South Entry Improvements • Park Access Road Including Vehicular Creek Crossing • Pedestrian and Bicycle Trail Network Creekside Discovery Zone • Parking for Group Picnic Area • Pedestrian Bridge	Active Recreation Zone • Parking for Active Recreation Zone Creekside Discovery Zone • Parking for Event Pavilion	Nature Exploration Zone • North Entry and Parking at Bike Skills Course
Habitat Restoration	Creekside Discovery Zone • Creekside Trails, Overlooks and Habitat Restoration Areas o Oak Woodland o Oak Forest o Riparian Buffer	Active Recreation Zone • Wetland Nature Exploration Zone • Oak Woodland • Native California Grassland • Oak Forest • Riparian Buffer • Wetland	
Recreational Amenities	Creekside Discovery Zone • Nature Playscape • Group Picnic Area Including Sand Volleyball Courts • Restroom • Begin Establishment of Community Orchard Active Recreation Zone • VYSL Interim Field Development	Active Recreation Zone • Community Recreation Center • Sports Complex • Splash Pad and Central Lawn Area • VYSL Permanent Field Development Creekside Discovery Zone • Event Pavilion • Native Pollinator Garden	Nature Exploration Zone • Bike Skills Course Active Recreation Zone • Skate Park • Dog Park

Prior to the commencement of each implementation project, the following base information should be prepared :

- Detailed Topographic and Horizontal Control Survey
- Detailed Geotechnical Report for Area of Development

Appendix B – Summary of Public Outreach Meeting #1

City of Vacaville
Centennial Park Master Plan Public Meeting #1
Summary

An in-person meeting was held on Saturday, December 3, 2022 at the Ulatis Community Center in Vacaville, California from 9:30 am to 11:30 am. The open house format consisted of a sign-in table, display boards of the existing conditions and draft master plan, focus boards on each of the three zones of the park, and a comment station asking each of the below questions to elicit specific community feedback and open discussion. Additionally, a short presentation on the site history, community input history, was followed by a lengthy public discussion.

1. What is the highest priority feature?
2. What feature do you like the best?

A total of 59 people signed in at the workshop. Attendees were primarily adults and seniors, with a few children and teenagers or young adults. Following is a summary of comments received by attendees. Sign-in sheets, with emails redacted, are included as Attachment A. Additionally, a representative of the Solano County Tennis Association provided a binder with comments and additional information on tennis club activities.

A variety of differing views were expressed at this meeting. While there is a strong desire for additional lighted facilities, particularly tennis courts, pickleball courts, and a dog park, there is also a strong interest in maintaining the existing natural area and limiting impacts on neighboring residences. Several people expressed a desire for a large splash pad and others were concerned about the potential water use. Concerns about park maintenance and security, particularly in light of current levels at existing facilities, were a raised by many attendees. Similarly, questions about funding, especially funding available from Measure M, were a repeated topic of discussion. More information about public comments is discussed in the sections below.

Summary of Written and Verbal Comments:

The most common comments received both during the public discussion and in the written comment boxes are summarized below. Scans of written comments submitted in the comment boxes are included in Attachment B.

- Desire for tennis and pickleball complexes of 8-12 lighted courts. There was also concern about whether this is the best location for pickleball due to wind.
- Requests for an expanded and improved dog park with lighting, covered seating, and various substrates.
- Desire to limit development of new facilities or look at alternate locations south of Brown's Valley Parkway in order to conserve natural areas with minimal improvements such as native plant restoration, increased naturalized areas, and maintenance of hiking trails
- Desire for a universal playground and splash pad as well as concerns about potential water use of such facilities in drought conditions.
- Concerns regarding the lack of maintenance for existing park facilities and how any new facilities will be maintained

- Concerns about potential impacts on nearby residents, particularly regarding increased traffic, parking overflow, light pollution, noise, and undesirable uses
- Desire for increased lighting for evening use of facilities, both sports field and dog park
- Concerns over funding for park improvements and suggestions on how to create revenue
- Desire for improved bike and pedestrian access to the park
- Request for restrooms and drinking water closer to sport facilities
- Desire for safety measures at park facilities and amenities such as fencing and traffic barriers
- Request to consider additional large-scale community outreach / needs assessment
- Suggestions to expand community involvement, particularly youth groups, in both planning and park activities; none of the meeting attendees had participated in previous Centennial Park Master Plan outreach activities
- Desire for upgrades to the baseball complex
- Concerns about proposed changes to soccer complex, particularly recently constructed field
- Desire for Interpretive and regulatory signage along trails
- Desire for sand volleyball courts

Responses posted to the comment board are documented below.

Prompt 1: What is the highest priority feature?

1. Lighted tennis courts. Give tennis the pickleball courts so they will have 8.
2. Lighted tennis/pickleball courts. 8-12
3. Keeping a lot of the park very natural, protecting wildlife and quietude. Minimizing light pollution, downward facing lights like those used in dark-sky parks.
4. Playground and splashpad.
5. Pickleball courts are needed in the city. Location needs to be carefully chosen with pickleball players as wind is critical! Thanks!
6. In addition to the wind screens for the north side of tennis courts plant oleander. 2 porta potties next to the courts.
7. No oleander plants. Poisonous to pets and not good for green bin recycling.
8. Plant more trees for wind break near tennis courts. Thanks
9. Restrooms but city staff need to lock and unlock them each day so homeless people don't spend the night inside.
10. Maintain and improve current park amenities
11. Trash cans and poo bags on trails
12. Parking to accommodate current and future use.
13. More trees and trail maintenance.
14. Grass in dog park & seating. Water/pool
15. Restrooms – possibly consider using porta-potties temporarily until a permanent structure is built.
16. Maintain significant amounts of natural land. I do think the natural land is currently underutilized.

Prompt 2: What feature do you like the best?

1. Dog park
    a. Needs lighting
    b. Need circular walkway
    c. Bench and picnic area
2. Bike Park
3. Native plants
    a. More trees
    b. Lighting
    c. Dog park
4. Coordinate schools (8th grade) near Earth Day for a cleanup day to pick up garbage
5. Native plant and pollinator garden
6. Native plant garden and any additional plantings of natives through park
7. Playground
8. Nature areas
9. Native plantings
10. Attn to native wildlife
11. Develop and maintain good walking trails

Appendix A – Sign-In Sheets

CENTENNIAL PARK MASTER PLAN

PUBLIC MEETING # 1 SIGN-IN SHEET

December 2, 2022, 9:30 a.m.-11:30 p.m.

Ulatis Community Center

Name	E-mail	Send updates via e-mail?	Include Name in Attendee List
Rick Nelsen			✓
Betsy Beavers		✓	✓
Mike Bovee		✓	✓
Cheryl "		✓	
Drew Gardner			✓
Chris Smith		✓	✓
Kellen Smith		✓	✓
Michael Vlach		✓	✓
Stacy Villanueva			✓
Michelle Simonin		✓	✓
Tim Hardwick		—	—
Jessy Christopher		✓	✓
Catherine Cooper		✓	
Michael R Cooper		—	

CENTENNIAL PARK MASTER PLAN

PUBLIC MEETING # 1 SIGN-IN SHEET

December 2, 2022, 9:30 a.m.-11:30 p.m.

Ulatis Community Center

Name	E-mail	Send updates via e-mail?	Include Name in Attendee List
Bruce Hewett		.com ✓	✓
Kristy Hewett		(-	
Donald Solomon		✓	✓
Katelyn Reid		✓	✓
Lynda Parenio		✓	✓
NORM ROBERGE		✓	✓
Blair Acs		—	—
Shannon Lyon		✓	
Jessica Ramer		✓	✓

CENTENNIAL PARK MASTER PLAN

PUBLIC MEETING # 1 SIGN-IN SHEET

December 2, 2022, 9:30 a.m.-11:30 p.m.

Ulatis Community Center

Name	E-mail	Send updates via e-mail?	Include Name in Attendee List
Elizabeth Crisa			
DON LAGASCA		✓	
Wil SMEBACK			
CINDY GRINER			
RACHEL GRINER			
Tony Smith			
Amy Pruitt			
JOHN WINKLESON			X
Dean Caserza			
EVA Jee		X	X
Ken Wilding		X	X
YOJI ENDO		✓	
Joanna Hurst		✓	X
Paul Whitney		✓	X
Pam Schector		✓	X
SEBASTIAN BLOOM		✓	X
FELICIA BLOOM			X
Aaron L King		✓	✓
Monica Boyle		.com	✓
TOM NORRIS		✓	✓
Sandra Abrams		X	X
Frank Mackey		X	✓

CENTENNIAL PARK MASTER PLAN

PUBLIC MEETING # 1 SIGN-IN SHEET

December 2, 2022, 9:30 a.m.-11:30 p.m.

Ulatis Community Center

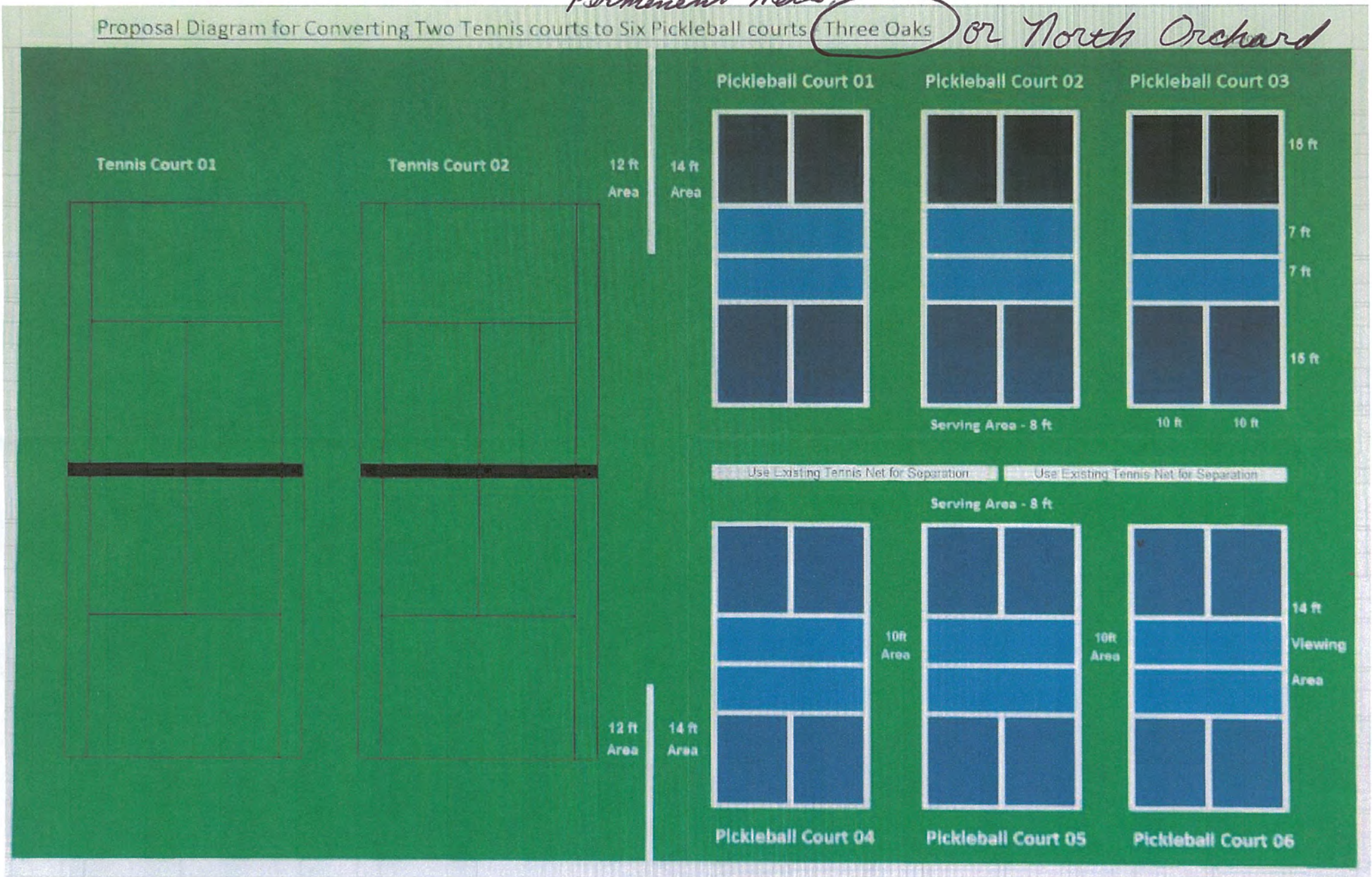
Name	E-mail	Send updates via e-mail?	Include Name in Attendee List
TONY MRAS		OK	OK
Esther Beavers		ok	ok
Vint Ellis		Ok	Ok
Anne Thurston (tennis			✓
Glenna Debbie Hunt		OK	OK
SEAN KELLY		OK	OK
Arne Salvesen		ok	OK
Ryan Bates		OK	OK
Azad Mojadedi		Yes	Yes
JANNA Mohnen		yes	yes
Rachel Johnston		Yes	Yes
Sasha Liu		~~Liu~~	~~Liu~~

Appendix B – Written Comments

The following are written comments submitted by meeting attendees in the comment boxes.

Approximate cost by first serve
$45,000.

Permenent Nets



Denise Doyle (707) 330-1589

A TENNIS CENTER
FOR USTA. AT LEAST
5-8 COURTS.

Wil Smelback
642 COUGAR CT
VACAVILLE

Dog Park

1. ample sitting
2. ample covering (we take dogs out in rain)
3. lighting. lighting in park
4. Tables
5. agility
6. grass/or fake grass

Chris Smith
chris@zapfly.com

Zap Fly
Drone Services

My concern is that there will be more soccer & ballfields, as well as other traffic inducing structures & activities. Parking is already a problem on weekends. New facilities need to be built in areas of the city experiencing growth. The park is a nature area & should be left as is w/ only minor improvements. There is only one other nature focused park in the city

& neither park should be further built out. Please consider the needs of all residents - not just those who want more soccer & ball fields.

Christie Hatfield
christychatfield@gmail.com

PS - I visit the park almost daily

- Disc golf site will not accommodate many holes (definitely not 9) given typical fairway lengths (300-450') and widths (150-250'). As much as I'd like to see D.G. course added, there's honestly not enough space.

- DO NOT PAVE any proposed trail! Consider DG or other more natural aesthetic that can still accommodate multi-use, be designed to allow drainage/prevent erosion and retain natural character.
  - Relatedly, finish circular trail around east side of Lake where it disconnects at inlet.
- Put dog park on south side of parking lot (where Disc golf is proposed) to satisfy adjacent property owners' privacy.
- #1 priority - PLAYGROUND FOR ALL ABILITIES!!!
- #2 - Gathering space/pavilion/music amphitheatre.

Relocate pines/resident part of little kids

~by: Jimi Scheid
jjscheid@gmail.com

Site #1 - Instead of DDG course (not large enough) why not consider ropes course, zipline structure (perhaps w/ private concessionaire & related insurance) ??

Please include water bottle filling stations in some locations.

Frank MacKey, 136 Bounty Lane Vacaville 95687
I am my wifes caregiver for 9 years dealing with cancer, I play tennis on the centennial courts 5 days a week It IS MY STRESS RELIEY. The courts were in VERY BAD shape till Tony Moras got involed. there were needs on the courts, dangerous cracks. I use to bring a bungee cord to use as a net strap there weren't net straps. But tony has made the courts clean ta JOY to play tennis on. It is close to where I live, so I can play, and then get back & care for my wife: I don't have time to come to this meeting, but it is VERY IMPORTANT to me. I am sure that for every tennis players that are here there are 10 players who wish they were here, but during the Christ mas season is VERY BUSY.

Frank Mackey

Tennis makes me a better CAREGIVER

Move RC course to
Lagoon Valley RC airplane
Region. to free up more space
for tennis.

Ryan Bates

Large Dog Park

- Large cement + covered sitting area with lights, misters + heating.
- Plenty sitting areas around park + more dog poop bag stations.
- Full Agility course
- Big water play stations
- more drinking areas around park.
- More trees
- Drink holders around fence

Kelly S. 707.344.5416

Dog PARK

1) Lighting (on a timer like public pool hot tubs 30 min on then reset if needed)

does not need to be super bright just enough.

2) more covered seating area.
present day area has small (high) shelter that gives very little cover

Sebastian
cityofvacaville@snbcan.com

3) No real grass unless good maintenance plan. rather not have mud.

- need dedicated P.B. courts w/nets, lights, bathrm.

- P.B. fact 2 Tennis courts = 6 P.B. courts

- P.B. social sport and all ages can play

- Tennis needs their area - dedicate cementinal.
- P.B. needs their area at least paint courts → court - North orch
  already as lights - 3 oaks
- Community can make money by classes giving for P.B. just like Tennis

- Measure M. money 40 million
- Ask for new Public works ~~Survey~~ survey of court use. now. VS. 2013

Glad to see you are keeping the hockey area! Lots of Children, including my own use this area for playing hockey, as well as learning how to ride bikes, etc. The problem is Safety for 2 reasons.

1) it is not fenced in and people start driving cars in an area where Children are playing.

2) There is a sharp drop off on the Browns Valley side of the area that kids can fall off of

It would be great if you could fence this area in to

OVER →

Provide safety from car traffic as well as falling off of a ~~edge~~ ledge, and also make the area more useable for playing hockey.

Drew Gantner
dgantner78@gmail.com
(925) 864-2156

WE NEED A REGIONAL TENNIS CENTER - MORE COURTS IN ONE PLACE.

NOT LESS.

DO NOT REMOVE THE CURRENT 4 TENNIS COURTS.

TOM MRAS

Pickleball does want designated courts but not in that area. I have been working with the city on this and it was a surprise to see this added to the list of amenities at Centennial. Sue tennis these four courts that would be 8 for them lets talk Diana 707 6-894181

Tennis

It appears a lot of thought and foresight went into this plan. We appreciate your dedication to the citizens of Vacaville. Speaking on behalf of the tennis community I would implore you to consider the allowance of the four current courts in addition to the proposed four tennis courts on the south end.

~Humble citizen

I am very pleased to know you have a Centennial Park Draft Master Plan, and are seeking public input. Only a few years ago I ran the trails of Brown's Valley Ridge and Centennial Park. I am now 79 years old and no longer able to run the trails, but I STILL enjoy walking them. I once enjoyed coaching my grandchildrens SOCCER teams and watching them play baseball there. I specially enjoy watching wildlife in the old sewage ponds when they have water in them and along the creeks all year. I document the presence of mushrooms, ~~and other~~ slime molds, and plants on the iNaturalist web site. I am especially interested in the restoration of the grasslands between the creeks. I helped plant native plants along the abandoned railroad track and am interested in helping restore grasslands. I have California fuschia and showy milkweed to donate.

Jim Hardwick
jhardwic@comcast.net
707-330-2390

Can you please make sure that the playground and splashpad are big and not too small.

Thank you

-Aria Mojadedi

Avery Mojadedi

Please Keep A Lot of the Park Very Natural

I have lived in Browns Valley all of my life (25 years), and this park is very important to me and to my community. My family and friends, both those living in Browns Valley and in other parts of the city, all use this park primarily for taking daily walks and enjoying the reprieve from development (man-made things). We grew up playing soccer and tennis at Horse creek and have amazing memories in these places. Now, as we have grown up, enjoying nature and the quiet is the most important aspect of the park for us. The quietude and small attempt at an escape from the build up of man-made construction is important to the mental health of all of us who live in Browns Valley and in Vacaville.

I am very concerned about light pollution in the area, and concerned about too many man-made things pushing out the natural world and wildlife. I would ask that all lights are downward facing, like those used in Dark-Sky Parks (and not flourescent or blue lights).

Personally, I (and my family and friends) have no need for any changes at Centennial Park. I enjoy it exactly as it is. However, I recognize this park does not belong to me and my memories, but to all of us. I appreciate all of the hard work that has already gone into this and will continue, and will try to accept the changes gracefully. I would simply ask that priority be given to protecting the natural landscape and wildlife as much as possible in the area. Thank you for all of your hard work and care. I really appreciate how much thought and time you all have dedicated to this project and to taking care of our city!

Sincerely,
Katelyn Reid

~~Benches aro~~

A linear bench around the splash pad is great for parents to sit close to their kids. Please look at Johnson-Springview Park splash pad in Rocklin for ideas about types of bench, and wet structures.

Thank You

-Azad Mojadedi

- Create a mobile friendly website for Vacaville

- Create an app to log maintenance issues similar to the MyFairfieldCA app where residents can take photos at locations that need repairs

- Have a mic for
- Better maps (larger size & clearer)

Thanks for

resurfacing

Alamo Courts

(this was

already

done)

- Why MOVE THE TENNIS COURTS TO A NEW LOCATION?
- Why NOT JUST keep them AND Add BASKETBALL & MORE PICKELBALL?
- CAN we UP grade BASEBALL PARK?

Dog Park

1. ample sitting
2. ample covering (we take dogs out in rain)
3. lighting. lighting in park
4. Tables
5. agility
6. grass/or fake grass

PLEASE!!!

Send out an update to assess the current VV Rec needs - not just 2013 & a small 500 survey. Consider all of the changes since the Covid Pandemic - this is a major project which needs to be based upon current needs!!!

Hi. We are a military family. We have lived in CO, TN, FL, NC and UT in the last 10 years. Vacaville has great potential but is currently so behind - especially when it comes to parks & rec and especially with pickleball. Our family of 6 has played together for years... until moving here. Now, during the school year we can't play with our kids because the time it takes to set up a net + chalk lines (WHAT?! Never seen that before!) or drive down to 3 oaks and play on the confusing tennis/pb lines is too much for the window of time we have. We need one location with 8 courts with lights + nets + painted lines to restore this popular family activity. Seems it would be best to do pickleball courts at 3 oaks and the tennis community at centennial. Just please talk to PB people about specifics before doing anything cause what you do may not really

Please Use Healthy Lighting

Throughout the discussion, I am hearing about the various needs people may have for lighting. I do appreciate the reasons people may want additional lighting at Centennial Park - primarily safety.

I would please, please strongly request that all new lights installed be yellow, NOT blue or flourescent. I live very near this park and am intimately concerned with the biological effects of blue light on the body after dark. (Blue light keeping the body awake, while red light allows the body to naturally get ready for sleep, and also does not disrupt night vision.)

It would be absolutely AMAZING! if all new lights in the park could be yellow or even red! That would bring so much joy to my heart, to see steps taken to protect natural body rhythms for everyone who comes into contact with ~~them~~ man-made lights after dark, but especially for the people who live and sleep right next to the park. Thanks again for all of your time and dedication! I see that this is an immensely complicated topic, with so many conflicting needs and wants.

Sincerely,
Katelyn Reid
Browns Valley Resident
of 25 years

P.S. No lights would be even better for our bodies after

I Am A pickleball player.
I have been playing 10+ years.
I would like to see the
planned pb courts @ Centennial
go to the tennis people.
IT is way too windy at
Centennial park for PB. IF
The tennis folks had 6-8 courts
at Centennial. the pb people
could have 3 OAKS for PB
courts. I do like the neighbor
hood parks but we do NOT
WANT 2 pb courts here-2 pb
courts in Another area etc etc
IF 3 OAKS could be converted
to pb we could have 12
pb courts thus Allowing
tournaments which Run 3-4
DAYS. Entry Fees Are $25-50
plus $25% for each event NOT
→

Less Development Habitat

Land Preservation

Dog Park signs on Leash

Native Plants

seasonal pool water

By Horse Creek "Natural Drain"

Lights For Tennis ct

Leave Existing

* Maintenance costs
Rehabilitation

Someone needs to reach out to the local history organizations to coordinate information being posted in areas like the "former dump" about the history of ~~the~~ what was here before the park. Alot of new ~~re~~sidents, many with kids who'd come to the park, ~~are~~ moving to town. This would be a an opportunity to educate them about the history of their new community. ~~Many people who move~~ ~~This~~ It is important to ~~liver~~ this info to these folks where they are, as many people who move to Vacaville do so because they can't afford a more to live in urban area ~~that may not be~~ want, but learning about the ~~Vacaville~~ area history may not have occurred to them. this

City personnel need to lock up new bathrooms when park closes (or after the last "sporting event" of the day if that is after the official park closing time) to ensure homeless/drug users don't trash them or spend the night. ~~Additional~~ Some law enforcement support should be made available for problems that may arise (for instance, City employee encounters a homeless person in a bathroom who refuses to leave). Cost of this should be included in the budget estimate that councils/commissioners vote on.

Please reconsider the splash pad due to water shortages.

Lynda Parenio
Vacaville Resident 23yr
Lynda M Parenio
B.SN. RN

During pandemic I began playing PB (pickle ball) as a means of staying active outdoor The game is exploding across the nation. I have traveled throughout the states and played.

In Vacaville, we are sorely lacking the same level of support that I have seen in AZ, STL, Missouri and Salt Lake City. Public parks containing 6-10 pickleball courts that support tournamen and casual play are common. In some areas, even those with true seasons have 4 season courts.

Pickleball is different from tennis. The net height is lower & The court is smaller. Designated courts for PB are

Don't include the splash pad play area. With the shortage & restrictions about water, and drought, that isn't a good idea.

Please add +
Dacc boards to
Tennis Courts

Soft Rubber (Bouncy)
Playground turf

- Security Lights
- Patrol for homeless
people using Latreens
- Likes
Splash Pad - Please add
toys not
Just water
pads

How about some flowers that gives perennials color to the walking trails @ centennial park such as California poppies that bloom in the spring. poppies grow yr after yr. That will be beautiful!

The current parking lot @ the existing tennis courts is an eyesore with cars for sale left overnight, regularly. I have heard that the parking "enforcement" is only done if someone calls & complains. If tax $ are being invested to make Centennial Park a "destination" & visible by out of town visitors bringing their kids to sports tournaments/matches, a specific regulation/policy for Centennial Park needs to be made to ensure those cars are removed each night. Also, the park gates need to start being locked at the time of closing at night.

Michelle Simonin
45+ yr resident

not interested in developm
open land as VV parks dept
have not maintained park in
yrs. doing bare, bare minimum at
this stage - we need
more garbage cans, Tree care
& clean up.
Signs up for "no motorized
vehicles" on trails. & current
Trails maintained.

Improvements for this meeting:

- Bigger printouts of the maps without pixalation w/ Street names

- Microphone

- more engagement, virtual surveys

At the District 1 event @ Centennial Park back in May, it was mentioned that measure M funds were to be used to build the park "improvements". Today we were told there is no $ for any of this stuff. No mention of measure M was made. At future meetings about this an explanation of what happened to the measure M $ should be included in the background/history information.

It would be Nice to have all the soccer areas together in one place; the pickelballs courts in one place & tennis courts in one place. All with lights and bathrooms

The estimate for a bench at tennis court was ridiculously high get a lower bid

Highest Priority

Ease of entering / exiting -
to prevent traffic back-ups
on Browns Valley / Allison -

Enough parking -

Lighting for safety at night

Highest Priorities

* Retain existing tennis courts
* Expand 4 tennis courts @ Centennial to 8-10 tennis courts as Vacaville tennis center
* Create Pickleball Center apart from tennis center

We need perennial flowers on the existing trails @ Centennial park that are very low maintenance and needs very little H_2O

~~I don't want to~~ have the

^yearly cost of maintenance of all these upgrades to the park needs to be part of what is being "voted on" by various commissions/councils in the city. And public comment should be had on that cost estimate be had. The estimate should also include the possible sources for sure of funding. People need to know if their taxes/fees would have to be increased in future to cover this or if the various sports activities will "bring in" the $ needed to cover it

Leave the park as is except for tennis court addition

Definitely need more parking at Centennial :)

WE NEED INCREASED FOCUS AND ATTENTION ON EXISTING HIKING TRAILS. I'VE TAKEN MY OWN GARDEN TOOLS TO CLEAR TREE AND WEED OVERGROWTH ON THE HIKING TRAIL THAT RUNS BETWEEN HORSE CREEK AND THE DOG PARK AND SOCCER FIELD FENCE LINE. IT WAS UNWALKABLE OR UNPASSABLE AT SOME POINTS FOR A LONG TIME UNTIL I DECIDED TO CLEAR THE TRAIL.

- Bike access to the Park - ALLISON/BROOKS VALLEY
- Retain existing tennis courts - Add lighting
-

Dog park obviously needs to be ~~moved~~ built before new community center since new C.C. is to be located at the current dog park

- Don't need more traffic

- Roads not maintain as is

- Need staff to maintain park

12/2/22

Please save
the (4) tennis courts
at Centennial Park.
We play there every
Mon, Wednes & Friday mornings.

Bike trail access to
park

More tennis courts
near location of other
(4) courts that already exist.
on Browns Valley Road

Keep existing courts
& add a rest room & lighted
courts.

Thanks.

Priorities

1. Established Restroom facilities
2. Traffic flow patterns
   ingress / egress
   safely
3. Drinking / Potable
   water sources

Leave walkway between vacant courts (Centennial Park) when more are developed

NO Splash

PAD

We are in

a drought

We don't have

enough H_2O

Do not want a skate park. If it is required that one be put in, please move it to an area farthest from homes. Angry, rebellious teenagers playing loud music on their stereos would definitely be disturbing to people living nearby. Also, if there's no guarantee that additional police patrols will be provided to prevent teenagers using the skate park from heading into the residential area & vandalizing homes & property and/or walking/biking around with loud music blaring, that would be unsafe.

Appendix C – Summary of Public Outreach Meeting #2

City of Vacaville
Centennial Park Master Plan Public Meeting #2
Summary

A virtual public meeting was held on Wednesday, December 7, 2022 via Zoom from 6:00 pm to 7:30 pm. The meeting began with a presentation on the history of the project and overview of the proposed master plan. Following the presentation, a poll was opened for approximately three minutes to elicit attendee input on priorities and favorite features. The poll was followed by a question-and-answer period. Attendees chose to submit questions through the Zoom chat, which were then answered by HELIX or City of Vacaville staff.

Approximately 31 people attended the workshop. Main topics of conversation included concerns about sufficient parking for the proposed improvements and uses, interest and support for the bike park and sand volleyball courts as filling a need not addressed elsewhere in the City, and concerns about maintenance, safety, and the impact of proposed improvements on the surrounding residents. The highest priority features were bathrooms and trails / open space, followed by the bike park, dog park, and tennis or pickleball courts. The bike park and trails / open space were also the features selected most often as favorites of the attendees. Comments received from attendees and the results of the two polls are summarized below.

Summary of Question and Answer Period:

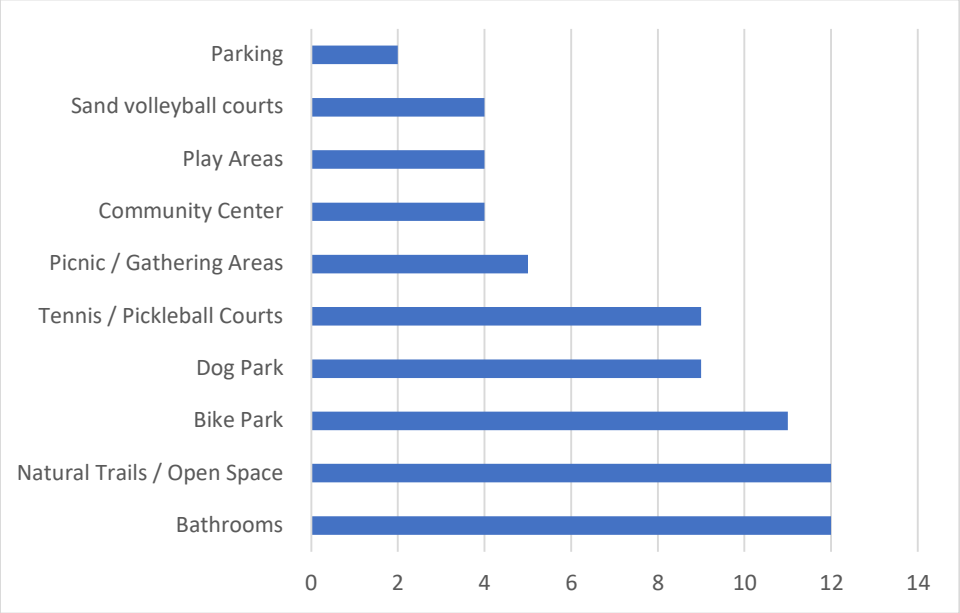
The most common topics of comments or questions received during the meeting are summarized below.

- Concerns over the quantity of parking to support new facilities since existing lots are crowded when games are occurring at sports complexes
- Suggestions for bike park facilities and maintenance
- Concerns about maintenance and security of existing and proposed facilities
- Support for sand volleyball courts and request for lighting and clustering of courts
- Desire for walking and multi-use trails, particularly through natural open space and concerns about limiting motorized vehicles on trails
- Concerns about noise and lighting impacting nearby residents
- Desire for additional tennis and pickleball courts and suggestion that rest/ waiting areas be incorporated into court design and that they possibly be located closer to the Community Center
- Desire for bathrooms, particularly near sport courts / fields
- Desire for lighted parking lots and facilities for nighttime use
- Questions about the community center / gym
- Concerns and suggestions regarding park energy usage, including the potential for solar power generation on site
- Concern about redeveloping recently constructed soccer field

Poll Question 1: What Are Your Three Highest Priority Features?

Attendees were asked to select their three highest priority features. They had the option to choose from a list or enter their own answer. Chart 2 summarizes responses receiving more than one vote. Individual comments are provided following the table. Individual comments that were similar were combined into one answer category.

Chart 1 – Highest Priority Features

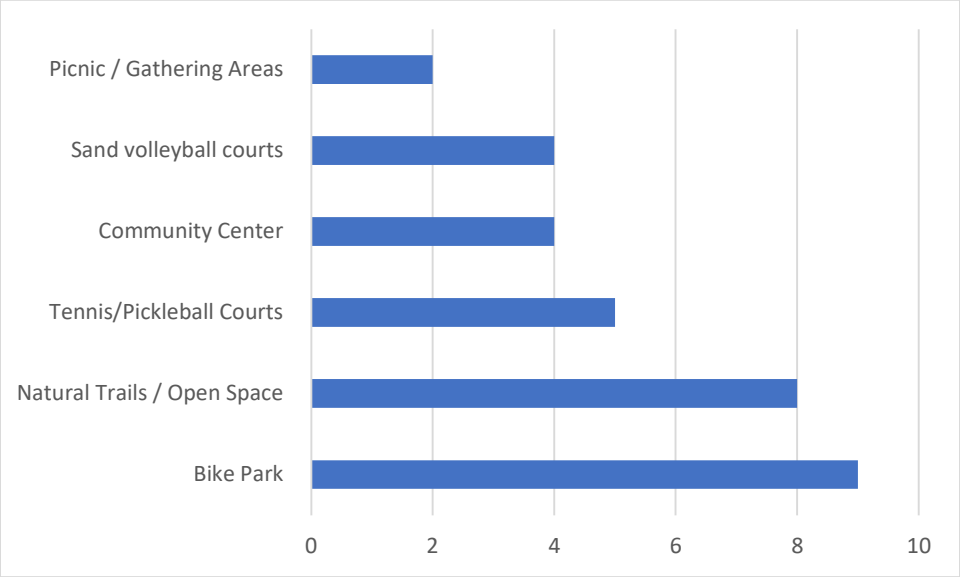


- Additional Baseball/Softball fields
- Amphitheater
- Connecting this park to other parks via bikeway paths
- Eradicate tallow trees
- Leaving the area in a natural state, preserving wetlands
- Lighting
- Maintenance areas
- Minimal traffic, monitor homelessness
- More growth for soccer fields and bathrooms
- Police presence to stop motorized vehicles.
- Skate Park
- Would love to see a larger dog park.

Survey Question 2: What Feature Do You Like Best?

Attendees were asked to select their favorite feature. They had the option to choose from a list or enter their own answer. Chart 2 summarizes responses receiving more than one vote. Individual comments are provided following the table. Individual comments that were similar were combined into one answer category.

Chart 2 – Favorite Feature



- Bathrooms
- Bathrooms that are maintained and made sure to be clear of homeless people using them for recreation
- Connecting all areas together
- Creeks
- Dog Park
- Event Area
- I like that it will have lights. They are needed throughout the park for safety and security
- Loop style traffic flow with many features
- Sports fields that fill the park every weekend!!
- Walking trails

Appendix C

CalEEMod Outputs

Centennial Phase I R3 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Centennial Phase I R3
Construction Start Date	10/1/2024
Operational Year	2036
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	34.8
Location	38.38568547886868, -121.96718277626235
County	Solano-Sacramento
City	Vacaville
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	832
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.23

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

City Park	120	Acre	120	0.00	8,350	50,300	—	—
Other Asphalt Surfaces	2.27	Acre	2.27	0.00	0.00	—	—	—
Parking Lot	0.53	Acre	0.53	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.70	49.6	42.9	0.14	1.82	10.4	12.2	1.69	4.68	6.37	18,494
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.11	45.7	37.9	0.14	1.59	6.32	7.91	1.48	2.16	3.64	18,405
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.82	30.3	26.5	0.10	1.04	4.55	5.52	0.97	1.73	2.62	12,998
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	5.52	4.83	0.02	0.19	0.83	1.01	0.18	0.32	0.48	2,152

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	4.70	49.6	42.9	0.14	1.82	10.4	12.2	1.69	4.68	6.37	18,494
2026	3.96	41.7	37.2	0.14	1.46	6.32	7.78	1.36	2.16	3.52	18,222
2027	3.85	39.6	36.8	0.14	1.37	6.32	7.69	1.27	2.16	3.43	18,001
2028	3.76	37.8	36.7	0.14	1.29	6.32	7.62	1.21	2.16	3.37	17,749
2029	3.66	35.7	36.2	0.14	1.21	6.32	7.54	1.13	2.16	3.29	17,517
2030	3.57	34.2	36.1	0.14	1.18	6.32	7.50	1.10	2.16	3.26	17,279
2031	3.50	32.9	35.8	0.14	1.15	6.32	7.47	1.07	2.16	3.23	17,067
2032	3.39	31.3	34.9	0.14	1.07	6.32	7.40	1.00	2.16	3.17	16,856
2033	0.40	3.27	5.36	0.01	0.07	0.18	0.25	0.06	0.04	0.11	923
2034	0.40	3.25	5.34	0.01	0.07	0.18	0.25	0.06	0.04	0.10	920
2035	1.12	7.08	11.4	0.02	0.17	0.28	0.45	0.16	0.07	0.23	2,261
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2024	0.88	17.0	9.04	0.08	0.39	2.57	2.96	0.37	0.70	1.07	11,805
2025	4.11	45.7	37.9	0.14	1.59	6.32	7.91	1.48	2.16	3.64	18,405
2026	3.93	42.6	37.1	0.14	1.46	6.32	7.78	1.36	2.16	3.52	18,191
2027	3.82	40.5	36.7	0.14	1.37	6.32	7.69	1.27	2.16	3.43	17,971
2028	3.74	38.6	36.5	0.14	1.29	6.32	7.62	1.21	2.16	3.37	17,723
2029	3.64	36.5	36.1	0.14	1.21	6.32	7.54	1.13	2.16	3.29	17,493
2030	3.55	35.0	36.0	0.14	1.18	6.32	7.50	1.10	2.16	3.26	17,255
2031	3.48	33.6	35.7	0.14	1.15	6.32	7.47	1.07	2.16	3.23	17,045
2032	3.37	32.0	34.8	0.14	1.07	6.32	7.40	1.00	2.16	3.17	16,833
2033	3.30	30.8	34.2	0.14	1.01	6.32	7.33	0.95	2.16	3.11	16,664
2034	0.39	3.26	5.25	0.01	0.07	0.18	0.25	0.06	0.04	0.10	905
2035	0.39	3.23	5.23	0.01	0.06	0.18	0.24	0.06	0.04	0.10	902
Average Daily	—	—	—	—	—	—	—	—	—	—	—

2024	0.16	3.01	1.62	0.01	0.07	0.45	0.52	0.07	0.12	0.19	2,126
2025	2.47	28.1	22.8	0.09	0.96	4.55	5.51	0.89	1.73	2.62	11,966
2026	2.82	30.3	26.5	0.10	1.04	4.48	5.52	0.97	1.54	2.50	12,998
2027	2.74	28.7	26.2	0.10	0.98	4.48	5.46	0.91	1.54	2.45	12,841
2028	2.68	27.5	26.2	0.10	0.93	4.49	5.42	0.86	1.54	2.40	12,698
2029	2.60	25.9	25.8	0.10	0.87	4.48	5.35	0.81	1.54	2.34	12,499
2030	2.54	24.8	25.7	0.10	0.84	4.48	5.32	0.78	1.54	2.32	12,327
2031	2.49	23.8	25.5	0.10	0.82	4.48	5.30	0.76	1.54	2.30	12,177
2032	2.42	22.7	24.9	0.10	0.77	4.49	5.26	0.72	1.54	2.26	12,059
2033	0.80	7.16	8.85	0.03	0.22	1.20	1.42	0.20	0.40	0.60	3,426
2034	0.28	2.32	3.74	0.01	0.05	0.13	0.17	0.04	0.03	0.07	648
2035	0.41	2.54	4.06	0.01	0.05	0.11	0.16	0.05	0.03	0.08	745
Annual	—	—	—	—	—	—	—	—	—	—	—
2024	0.03	0.55	0.30	< 0.005	0.01	0.08	0.10	0.01	0.02	0.03	352
2025	0.45	5.12	4.16	0.02	0.18	0.83	1.01	0.16	0.32	0.48	1,981
2026	0.51	5.52	4.83	0.02	0.19	0.82	1.01	0.18	0.28	0.46	2,152
2027	0.50	5.24	4.78	0.02	0.18	0.82	1.00	0.17	0.28	0.45	2,126
2028	0.49	5.01	4.77	0.02	0.17	0.82	0.99	0.16	0.28	0.44	2,102
2029	0.48	4.72	4.70	0.02	0.16	0.82	0.98	0.15	0.28	0.43	2,069
2030	0.46	4.53	4.69	0.02	0.15	0.82	0.97	0.14	0.28	0.42	2,041
2031	0.45	4.35	4.65	0.02	0.15	0.82	0.97	0.14	0.28	0.42	2,016
2032	0.44	4.15	4.54	0.02	0.14	0.82	0.96	0.13	0.28	0.41	1,997
2033	0.15	1.31	1.62	0.01	0.04	0.22	0.26	0.04	0.07	0.11	567
2034	0.05	0.42	0.68	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	107
2035	0.07	0.46	0.74	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	123

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.77	0.44	3.72	0.01	0.01	0.93	0.94	0.01	0.24	0.24	1,020
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.71	0.51	3.68	0.01	0.01	0.93	0.94	0.01	0.24	0.24	952
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.40	0.25	1.81	< 0.005	< 0.005	0.48	0.48	< 0.005	0.12	0.12	521
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	0.05	0.33	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	86.3

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.71	0.44	3.72	0.01	0.01	0.93	0.94	0.01	0.24	0.24	988
Area	0.05	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	11.4
Water	—	—	—	—	—	—	—	—	—	—	0.83
Waste	—	—	—	—	—	—	—	—	—	—	19.5
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.77	0.44	3.72	0.01	0.01	0.93	0.94	0.01	0.24	0.24	1,020
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.66	0.51	3.68	0.01	0.01	0.93	0.94	0.01	0.24	0.24	920

Area	0.05	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	11.4
Water	—	—	—	—	—	—	—	—	—	—	0.83
Waste	—	—	—	—	—	—	—	—	—	—	19.5
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.71	0.51	3.68	0.01	0.01	0.93	0.94	0.01	0.24	0.24	952
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.35	0.25	1.81	< 0.005	< 0.005	0.48	0.48	< 0.005	0.12	0.12	490
Area	0.05	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	11.4
Water	—	—	—	—	—	—	—	—	—	—	0.83
Waste	—	—	—	—	—	—	—	—	—	—	19.5
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.40	0.25	1.81	< 0.005	< 0.005	0.48	0.48	< 0.005	0.12	0.12	521
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.33	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	81.1
Area	0.01	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	1.89
Water	—	—	—	—	—	—	—	—	—	—	0.14
Waste	—	—	—	—	—	—	—	—	—	—	3.23
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.07	0.05	0.33	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	86.3

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.76	34.4	33.1	0.06	1.46	—	1.46	1.35	—	1.35	6,650
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	6.12	5.90	0.01	0.26	—	0.26	0.24	—	0.24	1,184
Dust From Material Movement	—	—	—	—	—	1.37	1.37	—	0.70	0.70	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.12	1.08	< 0.005	0.05	—	0.05	0.04	—	0.04	196
Dust From Material Movement	—	—	—	—	—	0.25	0.25	—	0.13	0.13	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.05	0.85	0.00	0.00	0.17	0.17	0.00	0.04	0.04	183
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	27.8

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	30.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.94
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.82

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	6,622
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	6,622
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	10.7	10.2	0.02	0.44	—	0.44	0.41	—	0.41	2,384
Dust From Material Movement	—	—	—	—	—	1.29	1.29	—	0.51	0.51	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.95	1.86	< 0.005	0.08	—	0.08	0.07	—	0.07	395
Dust From Material Movement	—	—	—	—	—	0.24	0.24	—	0.09	0.09	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.05	0.85	0.00	0.00	0.17	0.17	0.00	0.04	0.04	183
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.71	0.00	0.00	0.17	0.17	0.00	0.04	0.04	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	60.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	6,621
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	6,621
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	19.4	19.7	0.04	0.80	—	0.80	0.74	—	0.74	4,729
Dust From Material Movement	—	—	—	—	—	2.56	2.56	—	1.02	1.02	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.55	3.59	0.01	0.15	—	0.15	0.13	—	0.13	783
Dust From Material Movement	—	—	—	—	—	0.47	0.47	—	0.19	0.19	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.79	0.00	0.00	0.17	0.17	0.00	0.04	0.04	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	19.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	6,621
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	6,621
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	18.3	19.5	0.04	0.75	—	0.75	0.69	—	0.69	4,729
Dust From Material Movement	—	—	—	—	—	2.56	2.56	—	1.02	1.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	3.33	3.56	0.01	0.14	—	0.14	0.13	—	0.13	783
Dust From Material Movement	—	—	—	—	—	0.47	0.47	—	0.19	0.19	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.74	0.00	0.00	0.17	0.17	0.00	0.04	0.04	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	159
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	19.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	6,621

Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	6,621
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.06	17.4	19.5	0.04	0.71	—	0.71	0.65	—	0.65	4,742
Dust From Material Movement	—	—	—	—	—	2.57	2.57	—	1.02	1.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	3.18	3.55	0.01	0.13	—	0.13	0.12	—	0.12	785
Dust From Material Movement	—	—	—	—	—	0.47	0.47	—	0.19	0.19	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.70	0.00	0.00	0.17	0.17	0.00	0.04	0.04	171
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.58	0.00	0.00	0.17	0.17	0.00	0.04	0.04	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.41	0.00	0.00	0.12	0.12	0.00	0.03	0.03	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	18.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Grading (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	6,619
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	6,619

Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	16.2	19.2	0.04	0.65	—	0.65	0.60	—	0.60	4,728
Dust From Material Movement	—	—	—	—	—	2.56	2.56	—	1.02	1.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	2.96	3.50	0.01	0.12	—	0.12	0.11	—	0.11	783
Dust From Material Movement	—	—	—	—	—	0.47	0.47	—	0.19	0.19	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.54	0.00	0.00	0.17	0.17	0.00	0.04	0.04	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.38	0.00	0.00	0.12	0.12	0.00	0.03	0.03	112

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	18.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Grading (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	21.7	26.9	0.06	0.88	—	0.88	0.81	—	0.81	6,619
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	21.7	26.9	0.06	0.88	—	0.88	0.81	—	0.81	6,619
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.94	15.5	19.2	0.04	0.63	—	0.63	0.58	—	0.58	4,728

Dust From Material Movement	—	—	—	—	—	2.56	2.56	—	1.02	1.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	2.82	3.50	0.01	0.12	—	0.12	0.11	—	0.11	783
Dust From Material Movement	—	—	—	—	—	0.47	0.47	—	0.19	0.19	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.03	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	151
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.36	0.00	0.00	0.12	0.12	0.00	0.03	0.03	109
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	18.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Grading (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.66	20.6	26.6	0.06	0.86	—	0.86	0.79	—	0.79	6,619
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.66	20.6	26.6	0.06	0.86	—	0.86	0.79	—	0.79	6,619
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	14.7	19.0	0.04	0.61	—	0.61	0.56	—	0.56	4,728
Dust From Material Movement	—	—	—	—	—	2.56	2.56	—	1.02	1.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	2.69	3.47	0.01	0.11	—	0.11	0.10	—	0.10	783

Dust From Material Movement	—	—	—	—	—	0.47	0.47	—	0.19	0.19	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.59	0.00	0.00	0.17	0.17	0.00	0.04	0.04	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.49	0.00	0.00	0.17	0.17	0.00	0.04	0.04	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.34	0.00	0.00	0.12	0.12	0.00	0.03	0.03	107
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	17.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	6,619
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	6,619
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.84	13.9	18.5	0.04	0.57	—	0.57	0.52	—	0.52	4,741
Dust From Material Movement	—	—	—	—	—	2.57	2.57	—	1.02	1.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.54	3.37	0.01	0.10	—	0.10	0.10	—	0.10	785
Dust From Material Movement	—	—	—	—	—	0.47	0.47	—	0.19	0.19	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.03	0.56	0.00	0.00	0.17	0.17	0.00	0.04	0.04	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.46	0.00	0.00	0.17	0.17	0.00	0.04	0.04	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.32	0.00	0.00	0.12	0.12	0.00	0.03	0.03	105
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	17.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	6,619

Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	3.26	4.44	0.01	0.13	—	0.13	0.12	—	0.12	1,166
Dust From Material Movement	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.60	0.81	< 0.005	0.02	—	0.02	0.02	—	0.02	193
Dust From Material Movement	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.44	0.00	0.00	0.17	0.17	0.00	0.04	0.04	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	25.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Soil Import (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	4.93	6.15	0.02	0.21	—	0.21	0.19	—	0.19	1,838
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.89	1.11	< 0.005	0.04	—	0.04	0.03	—	0.03	331
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	54.8
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	42.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	12.1	2.70	0.06	0.18	2.50	2.68	0.18	0.69	0.86	9,926
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	2.12	0.48	0.01	0.03	0.44	0.47	0.03	0.12	0.15	1,788
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.39	0.09	< 0.005	0.01	0.08	0.09	0.01	0.02	0.03	296

3.23. Soil Import (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	4.26	6.09	0.02	0.18	—	0.18	0.16	—	0.16	1,839
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	4.26	6.09	0.02	0.18	—	0.18	0.16	—	0.16	1,839
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	3.04	4.35	0.01	0.13	—	0.13	0.12	—	0.12	1,314
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.56	0.79	< 0.005	0.02	—	0.02	0.02	—	0.02	218
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.21	0.00	0.00	0.04	0.04	0.00	0.01	0.01	45.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.18	10.9	2.58	0.06	0.18	2.50	2.68	0.18	0.69	0.86	9,748
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.3

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	11.7	2.63	0.06	0.18	2.50	2.68	0.18	0.69	0.86	9,738
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	30.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	8.17	1.86	0.04	0.13	1.76	1.88	0.13	0.48	0.61	6,958
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.49	0.34	0.01	0.02	0.32	0.34	0.02	0.09	0.11	1,152

3.25. Soil Import (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	3.88	6.11	0.02	0.16	—	0.16	0.15	—	0.15	1,841
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	3.88	6.11	0.02	0.16	—	0.16	0.15	—	0.15	1,841
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	2.77	4.36	0.01	0.11	—	0.11	0.10	—	0.10	1,315
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.51	0.80	< 0.005	0.02	—	0.02	0.02	—	0.02	218
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	44.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.18	10.6	2.57	0.06	0.18	2.50	2.68	0.18	0.69	0.86	9,535
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	40.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	11.5	2.63	0.06	0.18	2.50	2.68	0.18	0.69	0.86	9,526
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	29.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	7.99	1.86	0.04	0.13	1.76	1.88	0.13	0.48	0.61	6,806

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.46	0.34	0.01	0.02	0.32	0.34	0.02	0.09	0.11	1,127

3.27. Soil Import (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	3.61	6.12	0.02	0.15	—	0.15	0.13	—	0.13	1,841
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	3.61	6.12	0.02	0.15	—	0.15	0.13	—	0.13	1,841
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	2.58	4.37	0.01	0.10	—	0.10	0.10	—	0.10	1,315
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.47	0.80	< 0.005	0.02	—	0.02	0.02	—	0.02	218
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	43.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.18	10.4	2.51	0.06	0.18	2.50	2.68	0.18	0.69	0.86	9,320
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	39.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	11.2	2.56	0.06	0.18	2.50	2.68	0.18	0.69	0.86	9,311
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	28.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	7.81	1.81	0.04	0.13	1.76	1.88	0.13	0.48	0.61	6,652
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.43	0.33	0.01	0.02	0.32	0.34	0.02	0.09	0.11	1,101

3.29. Soil Import (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	3.29	6.11	0.02	0.13	—	0.13	0.12	—	0.12	1,842
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	3.29	6.11	0.02	0.13	—	0.13	0.12	—	0.12	1,842
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	2.35	4.37	0.01	0.09	—	0.09	0.09	—	0.09	1,319
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.43	0.80	< 0.005	0.02	—	0.02	0.02	—	0.02	218
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	42.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.18	10.1	2.51	0.06	0.18	2.50	2.68	0.18	0.69	0.86	9,073
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	39.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	11.0	2.50	0.06	0.18	2.50	2.68	0.18	0.69	0.86	9,065
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	28.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	7.65	1.81	0.04	0.13	1.76	1.89	0.13	0.48	0.61	6,494
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.40	0.33	0.01	0.02	0.32	0.34	0.02	0.09	0.11	1,075

3.31. Soil Import (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	3.00	6.08	0.02	0.12	—	0.12	0.11	—	0.11	1,843

Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	3.00	6.08	0.02	0.12	—	0.12	0.11	—	0.11	1,843
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.15	4.35	0.01	0.09	—	0.09	0.08	—	0.08	1,316
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.39	0.79	< 0.005	0.02	—	0.02	0.01	—	0.01	218
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	42.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.18	9.88	2.45	0.06	0.18	2.50	2.68	0.18	0.69	0.86	8,846

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	38.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	10.7	2.50	0.06	0.18	2.50	2.68	0.18	0.69	0.86	8,840
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	27.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	7.45	1.76	0.04	0.13	1.76	1.88	0.13	0.48	0.61	6,316
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.36	0.32	0.01	0.02	0.32	0.34	0.02	0.09	0.11	1,046

3.33. Soil Import (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	2.82	6.07	0.02	0.11	—	0.11	0.10	—	0.10	1,843
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	2.82	6.07	0.02	0.11	—	0.11	0.10	—	0.10	1,843

Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.02	4.34	0.01	0.08	—	0.08	0.07	—	0.07	1,316
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.37	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	218
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.18	9.69	2.39	0.06	0.18	2.50	2.68	0.18	0.69	0.86	8,611
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	37.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	10.5	2.44	0.06	0.18	2.50	2.68	0.18	0.69	0.86	8,606
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	27.2

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	7.31	1.72	0.04	0.13	1.76	1.88	0.13	0.48	0.61	6,148
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.33	0.31	0.01	0.02	0.32	0.34	0.02	0.09	0.11	1,018

3.35. Soil Import (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	2.63	6.07	0.02	0.11	—	0.11	0.10	—	0.10	1,843
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	2.63	6.07	0.02	0.11	—	0.11	0.10	—	0.10	1,843
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	1.88	4.34	0.01	0.08	—	0.08	0.07	—	0.07	1,316

Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.34	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	218
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	40.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.18	9.55	2.39	0.06	0.18	2.50	2.68	0.18	0.69	0.86	8,403
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	37.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	10.3	2.44	0.06	0.18	2.50	2.68	0.18	0.69	0.86	8,399
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	26.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	7.17	1.72	0.04	0.13	1.76	1.88	0.13	0.48	0.61	6,000
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.31	0.31	0.01	0.02	0.32	0.34	0.02	0.09	0.11	993

3.37. Soil Import (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	2.45	6.07	0.02	0.11	—	0.11	0.10	—	0.10	1,843
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	2.45	6.07	0.02	0.11	—	0.11	0.10	—	0.10	1,843
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	1.76	4.35	0.01	0.08	—	0.08	0.07	—	0.07	1,320
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.32	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	219

Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	39.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.18	9.36	2.33	0.06	0.18	2.50	2.68	0.18	0.69	0.86	8,195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	36.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.16	10.1	2.38	0.06	0.18	2.50	2.68	0.18	0.69	0.86	8,191
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	26.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	7.05	1.68	0.04	0.13	1.76	1.89	0.13	0.48	0.61	5,867
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.36
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.29	0.31	0.01	0.02	0.32	0.34	0.02	0.09	0.11	971

3.39. Soil Import (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	2.32	6.06	0.02	0.10	—	0.10	0.09	—	0.09	1,843
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.41	1.07	< 0.005	0.02	—	0.02	0.02	—	0.02	325
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.07	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	53.7
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.04	0.04	0.00	0.01	0.01	35.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	9.92	2.38	0.06	0.18	2.50	2.68	0.18	0.69	0.86	8,025

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	1.71	0.41	0.01	0.03	0.43	0.46	0.03	0.12	0.15	1,413
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.31	0.08	< 0.005	0.01	0.08	0.08	0.01	0.02	0.03	234

3.41. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	3.20	4.81	0.01	0.07	—	0.07	0.06	—	0.06	720
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	3.20	4.81	0.01	0.07	—	0.07	0.06	—	0.06	720
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.72	2.59	< 0.005	0.04	—	0.04	0.03	—	0.03	388
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.31	0.47	< 0.005	0.01	—	0.01	0.01	—	0.01	64.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.53	0.00	0.00	0.17	0.17	0.00	0.04	0.04	157
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	45.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.44	0.00	0.00	0.17	0.17	0.00	0.04	0.04	142
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	45.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.23	0.00	0.00	0.09	0.09	0.00	0.02	0.02	78.1
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	12.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.07
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.35	3.18	4.81	0.01	0.07	—	0.07	0.06	—	0.06	720
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	3.18	4.81	0.01	0.07	—	0.07	0.06	—	0.06	720
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.27	3.44	0.01	0.05	—	0.05	0.04	—	0.04	514
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.41	0.63	< 0.005	0.01	—	0.01	0.01	—	0.01	85.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.50	0.00	0.00	0.17	0.17	0.00	0.04	0.04	155
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	44.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.42	0.00	0.00	0.17	0.17	0.00	0.04	0.04	140
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	44.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.29	0.00	0.00	0.12	0.12	0.00	0.03	0.03	102
Vendor	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	31.6

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.9
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.22
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	3.15	4.81	0.01	0.06	—	0.06	0.06	—	0.06	720
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	3.15	4.81	0.01	0.06	—	0.06	0.06	—	0.06	720
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.12	1.70	< 0.005	0.02	—	0.02	0.02	—	0.02	255
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.20	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	42.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	154
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	42.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.40	0.00	0.00	0.17	0.17	0.00	0.04	0.04	139
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	42.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.14	0.00	0.00	0.06	0.06	0.00	0.01	0.01	50.2
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	15.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.31
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.51
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Paving (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	5.73	9.80	0.01	0.15	—	0.15	0.14	—	0.14	1,516
Paving	0.11	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	1.02	1.75	< 0.005	0.03	—	0.03	0.02	—	0.02	270
Paving	0.02	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	44.7
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.36	0.00	0.00	0.12	0.12	0.00	0.03	0.03	115
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.57	0.15	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06	496
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	0.01	0.01	18.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.11	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	88.4
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	14.6

3.49. Architectural Coating (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	134
Architectural Coatings	0.32	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	47.7
Architectural Coatings	0.11	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.90
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	0.71	0.44	3.72	0.01	0.01	0.93	0.94	0.01	0.24	0.24	988
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.71	0.44	3.72	0.01	0.01	0.93	0.94	0.01	0.24	0.24	988
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	0.66	0.51	3.68	0.01	0.01	0.93	0.94	0.01	0.24	0.24	920

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.66	0.51	3.68	0.01	0.01	0.93	0.94	0.01	0.24	0.24	920
Annual	—	—	—	—	—	—	—	—	—	—	—
City Park	0.06	0.05	0.33	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	81.1
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.06	0.05	0.33	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	81.1

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	11.4
Total	—	—	—	—	—	—	—	—	—	—	11.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	11.4
Total	—	—	—	—	—	—	—	—	—	—	11.4

Annual	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	1.89
Total	—	—	—	—	—	—	—	—	—	—	1.89

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.05	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—
Total	0.05	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.01	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.01	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.83
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.83
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.83
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.83
Annual	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.14
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.14

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	19.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	19.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	19.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	19.5
Annual	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	3.23
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	3.23

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description

Site Preparation	Site Preparation	4/1/2025	6/30/2025	5.00	65.0	—
Grading	Grading	7/1/2025	3/31/2033	5.00	2,023	—
Soil Import	Grading	10/1/2024	3/31/2033	5.00	2,218	—
Building Construction	Building Construction	4/1/2033	6/30/2035	5.00	586	—
Paving	Paving	7/1/2035	9/30/2035	5.00	65.0	—
Architectural Coating	Architectural Coating	4/1/2035	9/30/2035	5.00	130	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Soil Import	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Soil Import	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Building Construction	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45

Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	20.0	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.38	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	20.0	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	2.00	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT

Paving	Hauling	8.65	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Soil Import	—	—	—	—
Soil Import	Worker	5.00	11.7	LDA,LDT1,LDT2
Soil Import	Vendor	—	8.40	HHDT,MHDT
Soil Import	Hauling	135	20.0	HHDT
Soil Import	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,950	650	7,318

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	200	180	0.00	—

Grading	—	—	2,742	0.00	—
Soil Import	2,394,659	—	0.00	0.00	—
Paving	0.00	0.00	0.00	0.00	2.80

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
City Park	0.00	0%
Other Asphalt Surfaces	2.27	100%
Parking Lot	0.53	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005

2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2024	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	93.8	236	263	50,454	469	1,179	1,318	252,537
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,950	650	7,318

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
Parking Lot	20,224	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	910,277
Other Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	10.3	—
Other Asphalt Surfaces	0.00	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	8.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	7.75	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	3	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.2
AQ-PM	12.2
AQ-DPM	32.8
Drinking Water	17.5
Lead Risk Housing	0.64
Pesticides	45.8
Toxic Releases	43.3
Traffic	4.75
Effect Indicators	—
CleanUp Sites	64.7
Groundwater	59.6
Haz Waste Facilities/Generators	82.5
Impaired Water Bodies	0.00

Solid Waste	76.4
Sensitive Population	—
Asthma	89.2
Cardio-vascular	70.6
Low Birth Weights	10.4
Socioeconomic Factor Indicators	—
Education	16.8
Housing	20.6
Linguistic	0.00
Poverty	4.27
Unemployment	85.0

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.36673938
Employed	45.74618247
Median HI	88.24586167
Education	—
Bachelor's or higher	65.18670602
High school enrollment	100
Preschool enrollment	77.7235981
Transportation	—
Auto Access	92.6344155
Active commuting	14.5515206
Social	—

2-parent households	69.54959579
Voting	62.71012447
Neighborhood	—
Alcohol availability	97.0101373
Park access	32.08007186
Retail density	22.62286668
Supermarket access	7.416912614
Tree canopy	60.20787887
Housing	—
Homeownership	79.96920313
Housing habitability	89.32375209
Low-inc homeowner severe housing cost burden	65.7128192
Low-inc renter severe housing cost burden	74.33594251
Uncrowded housing	96.93314513
Health Outcomes	—
Insured adults	98.58847684
Arthritis	63.4
Asthma ER Admissions	17.2
High Blood Pressure	83.5
Cancer (excluding skin)	42.8
Asthma	58.2
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	79.3
Diagnosed Diabetes	89.8
Life Expectancy at Birth	81.7
Cognitively Disabled	80.8
Physically Disabled	88.8

Heart Attack ER Admissions	31.4
Mental Health Not Good	68.6
Chronic Kidney Disease	85.5
Obesity	54.0
Pedestrian Injuries	19.6
Physical Health Not Good	82.3
Stroke	88.3
Health Risk Behaviors	—
Binge Drinking	4.6
Current Smoker	58.7
No Leisure Time for Physical Activity	83.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	51.6
Elderly	70.8
English Speaking	89.1
Foreign-born	17.7
Outdoor Workers	69.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	70.0
Traffic Density	6.4
Traffic Access	23.0
Other Indices	—
Hardship	29.8
Other Decision Support	—
2016 Voting	69.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	33.0
Healthy Places Index Score for Project Location (b)	83.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Areas estimated from project description and site plan.
Construction: Construction Phases	No demolition required. Soil import and duration per project engineer. Construction schedule estimated based on project description and site plan. Building construction = all structures, fencing, lighting, and landscaping.
Construction: Off-Road Equipment	Added water truck (off highway truck) for dust suppression during soil import, site preparation, and grading. Added a loader and off highway truck for stockpiling of soil soil import. Reduced building construction equipment for small building size.
Construction: Trips and VMT	Building trips estimated for construction trips of up to 10 workers, and one vendor delivery per day. Paving import estimated assuming 12 inches uncompressed gravel/asphalt totaling 4,500 cubic yards. 8.65 one way trips per day assuming 16 CY per tandem trailer load.

Construction: On-Road Fugitive Dust	Project site is a developed area in the City of Vacaville, all project trips are on paved public roads.
Operations: Road Dust	Project site is a developed area in the City of Vacaville, all project trips are on paved public roads.
Construction: Dust From Material Movement	Soil import per project engineer, includes combined import for the bike course, great meadow trial, dog park, and Allison Parkway access improvements. Vegetation/debris export based on phase area.

Centennial Phase 2 R2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Centennial Phase 2 R2
Construction Start Date	4/1/2029
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	34.8
Location	38.372746236976525, -121.97146539387026
County	Solano-Sacramento
City	Vacaville
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	832
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Day-Care Center	10.0	1000sqft	0.23	10,000	0.00	—	—	—
Health Club	65.0	1000sqft	1.49	65,000	0.00	—	—	—
Parking Lot	2.94	Acre	2.94	0.00	0.00	—	—	—
Other Asphalt Surfaces	1.84	Acre	1.84	0.00	0.00	—	—	—
City Park	14.5	Acre	14.5	0.00	509,213	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.84	28.7	31.8	0.07	1.17	8.01	9.19	1.08	4.03	5.11	8,147
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.29	24.9	30.4	0.07	0.99	3.78	4.77	0.91	1.47	2.38	8,130
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.87	14.0	16.5	0.04	0.56	2.78	3.34	0.52	1.24	1.76	4,244
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	2.56	3.02	0.01	0.10	0.51	0.61	0.09	0.23	0.32	703

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2029	3.48	28.7	31.8	0.07	1.17	8.01	9.19	1.08	4.03	5.11	8,147
2030	1.04	8.77	14.0	0.03	0.26	0.35	0.61	0.24	0.08	0.33	2,975
2031	1.01	8.48	13.9	0.03	0.25	0.35	0.59	0.23	0.08	0.31	2,960
2032	0.99	8.22	13.8	0.03	0.23	0.35	0.58	0.21	0.08	0.29	2,946
2033	0.97	8.00	13.7	0.03	0.21	0.35	0.56	0.19	0.08	0.27	2,934
2034	4.84	8.61	14.9	0.03	0.20	0.44	0.65	0.19	0.11	0.30	3,104
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2029	3.29	24.9	30.4	0.07	0.99	3.78	4.77	0.91	1.47	2.38	8,130
2030	1.04	8.82	13.8	0.03	0.26	0.35	0.61	0.24	0.08	0.33	2,952
2031	1.01	8.52	13.8	0.03	0.25	0.35	0.59	0.23	0.08	0.31	2,938
2032	0.98	8.26	13.7	0.03	0.23	0.35	0.58	0.21	0.08	0.29	2,922
2033	0.96	8.04	13.6	0.03	0.21	0.35	0.56	0.19	0.08	0.27	2,910
2034	0.94	7.88	13.6	0.03	0.19	0.35	0.54	0.18	0.08	0.26	2,898
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2029	1.80	14.0	16.5	0.04	0.56	2.78	3.34	0.52	1.24	1.76	4,244
2030	0.74	6.28	9.88	0.02	0.19	0.24	0.43	0.17	0.06	0.23	2,110
2031	0.72	6.08	9.81	0.02	0.18	0.24	0.42	0.16	0.06	0.22	2,100
2032	0.70	5.90	9.77	0.02	0.16	0.24	0.41	0.15	0.06	0.21	2,096
2033	0.69	5.73	9.71	0.02	0.15	0.24	0.39	0.14	0.06	0.19	2,082
2034	1.87	4.29	7.08	0.01	0.11	0.21	0.31	0.10	0.05	0.15	1,531
Annual	—	—	—	—	—	—	—	—	—	—	—
2029	0.33	2.56	3.02	0.01	0.10	0.51	0.61	0.09	0.23	0.32	703
2030	0.14	1.15	1.80	< 0.005	0.03	0.04	0.08	0.03	0.01	0.04	349
2031	0.13	1.11	1.79	< 0.005	0.03	0.04	0.08	0.03	0.01	0.04	348

2032	0.13	1.08	1.78	< 0.005	0.03	0.04	0.07	0.03	0.01	0.04	347
2033	0.13	1.05	1.77	< 0.005	0.03	0.04	0.07	0.02	0.01	0.04	345
2034	0.34	0.78	1.29	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	254

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.98	5.24	40.7	0.10	0.13	8.79	8.92	0.13	2.23	2.36	11,751
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.89	5.95	37.5	0.09	0.13	8.79	8.92	0.12	2.23	2.35	11,093
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.38	5.10	32.9	0.08	0.12	7.70	7.83	0.12	1.95	2.07	10,281
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.53	0.93	6.01	0.02	0.02	1.41	1.43	0.02	0.36	0.38	1,702

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.35	4.38	36.7	0.09	0.06	8.79	8.85	0.06	2.23	2.29	9,490
Area	2.58	0.03	3.26	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	13.5
Energy	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,473
Water	—	—	—	—	—	—	—	—	—	—	48.7

Waste	—	—	—	—	—	—	—	—	—	—	725
Refrig.	—	—	—	—	—	—	—	—	—	—	0.35
Total	9.98	5.24	40.7	0.10	0.13	8.79	8.92	0.13	2.23	2.36	11,751
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.80	5.11	36.8	0.09	0.06	8.79	8.85	0.06	2.23	2.29	8,846
Area	2.05	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,473
Water	—	—	—	—	—	—	—	—	—	—	48.7
Waste	—	—	—	—	—	—	—	—	—	—	725
Refrig.	—	—	—	—	—	—	—	—	—	—	0.35
Total	8.89	5.95	37.5	0.09	0.13	8.79	8.92	0.12	2.23	2.35	11,093
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.02	4.25	30.6	0.08	0.06	7.70	7.76	0.05	1.95	2.01	8,027
Area	2.31	0.01	1.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.64
Energy	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,473
Water	—	—	—	—	—	—	—	—	—	—	48.7
Waste	—	—	—	—	—	—	—	—	—	—	725
Refrig.	—	—	—	—	—	—	—	—	—	—	0.35
Total	8.38	5.10	32.9	0.08	0.12	7.70	7.83	0.12	1.95	2.07	10,281
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.10	0.78	5.58	0.01	0.01	1.41	1.42	0.01	0.36	0.37	1,329
Area	0.42	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.10
Energy	0.01	0.15	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	244
Water	—	—	—	—	—	—	—	—	—	—	8.07
Waste	—	—	—	—	—	—	—	—	—	—	120
Refrig.	—	—	—	—	—	—	—	—	—	—	0.06
Total	1.53	0.93	6.01	0.02	0.02	1.41	1.43	0.02	0.36	0.38	1,702

3. Construction Emissions Details

3.1. Site Preparation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.40	28.0	31.0	0.06	1.16	—	1.16	1.07	—	1.07	6,653
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	4.99	5.52	0.01	0.21	—	0.21	0.19	—	0.19	1,185
Dust From Material Movement	—	—	—	—	—	1.37	1.37	—	0.70	0.70	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.91	1.01	< 0.005	0.04	—	0.04	0.03	—	0.03	196
Dust From Material Movement	—	—	—	—	—	0.25	0.25	—	0.13	0.13	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.70	0.17	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	630
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	27.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.13	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	112
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	18.6

3.3. Grading (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	24.8	29.8	0.07	0.99	—	0.99	0.91	—	0.91	7,958
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.22	24.8	29.8	0.07	0.99	—	0.99	0.91	—	0.91	7,958
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16	8.90	10.7	0.03	0.36	—	0.36	0.33	—	0.33	2,856
Dust From Material Movement	—	—	—	—	—	1.29	1.29	—	0.51	0.51	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.62	1.95	< 0.005	0.06	—	0.06	0.06	—	0.06	473
Dust From Material Movement	—	—	—	—	—	0.24	0.24	—	0.09	0.09	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.74	0.00	0.00	0.19	0.19	0.00	0.04	0.04	189
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.61	0.00	0.00	0.19	0.19	0.00	0.04	0.04	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.22	0.00	0.00	0.07	0.07	0.00	0.02	0.02	63.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	5.99	9.20	0.02	0.19	—	0.19	0.17	—	0.17	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.09	1.68	< 0.005	0.03	—	0.03	0.03	—	0.03	284

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.05	0.98	0.00	0.00	0.26	0.26	0.00	0.06	0.06	260
Vendor	0.01	0.33	0.14	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	310
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.81	0.00	0.00	0.26	0.26	0.00	0.06	0.06	237
Vendor	0.01	0.35	0.15	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	310
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.57	0.00	0.00	0.18	0.18	0.00	0.04	0.04	171
Vendor	0.01	0.25	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	221
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	28.3
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	36.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	5.80	9.18	0.02	0.17	—	0.17	0.16	—	0.16	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.06	1.67	< 0.005	0.03	—	0.03	0.03	—	0.03	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.05	0.93	0.00	0.00	0.26	0.26	0.00	0.06	0.06	255
Vendor	0.01	0.31	0.14	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.76	0.00	0.00	0.26	0.26	0.00	0.06	0.06	233
Vendor	0.01	0.34	0.14	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.54	0.00	0.00	0.18	0.18	0.00	0.04	0.04	168
Vendor	0.01	0.24	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	214
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	27.8
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	35.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	5.64	9.16	0.02	0.16	—	0.16	0.15	—	0.15	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.03	1.67	< 0.005	0.03	—	0.03	0.03	—	0.03	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.04	0.87	0.00	0.00	0.26	0.26	0.00	0.06	0.06	251

Vendor	0.01	0.31	0.13	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	290
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.72	0.00	0.00	0.26	0.26	0.00	0.06	0.06	227
Vendor	0.01	0.33	0.14	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	290
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.51	0.00	0.00	0.18	0.18	0.00	0.04	0.04	166
Vendor	0.01	0.23	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	207
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	27.5
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	34.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	5.48	9.13	0.02	0.15	—	0.15	0.13	—	0.13	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	1.00	1.67	< 0.005	0.03	—	0.03	0.02	—	0.02	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.04	0.83	0.00	0.00	0.26	0.26	0.00	0.06	0.06	248
Vendor	0.01	0.29	0.13	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	281
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	224
Vendor	0.01	0.32	0.14	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	281
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.48	0.00	0.00	0.18	0.18	0.00	0.04	0.04	163
Vendor	0.01	0.22	0.09	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	27.0
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	33.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	2.66	4.52	0.01	0.07	—	0.07	0.06	—	0.06	852
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.49	0.83	< 0.005	0.01	—	0.01	0.01	—	0.01	141
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.79	0.00	0.00	0.26	0.26	0.00	0.06	0.06	245
Vendor	0.01	0.29	0.13	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.05	0.66	0.00	0.00	0.26	0.26	0.00	0.06	0.06	221
Vendor	0.01	0.31	0.13	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.23	0.00	0.00	0.09	0.09	0.00	0.02	0.02	79.9
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	96.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	13.2
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	15.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	5.86	9.82	0.01	0.18	—	0.18	0.16	—	0.16	1,516
Paving	0.19	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	1.04	1.75	< 0.005	0.03	—	0.03	0.03	—	0.03	270
Paving	0.03	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	44.7
Paving	0.01	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.38	0.00	0.00	0.12	0.12	0.00	0.03	0.03	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.97	0.24	0.01	0.02	0.27	0.29	0.02	0.07	0.09	845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	0.01	0.01	19.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	0.04	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	150
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.9

3.17. Architectural Coating (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	134
Architectural Coatings	3.79	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	47.7
Architectural Coatings	1.35	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.90
Architectural Coatings	0.25	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.16	0.00	0.00	0.05	0.05	0.00	0.01	0.01	48.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	1.28	0.67	5.26	0.01	0.01	1.12	1.13	0.01	0.28	0.29	1,233
Health Club	5.98	3.66	31.0	0.08	0.05	7.56	7.62	0.05	1.92	1.97	8,136
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.09	0.05	0.46	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	121
Total	7.35	4.38	36.7	0.09	0.06	8.79	8.85	0.06	2.23	2.29	9,490
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	1.18	0.78	5.57	0.01	0.01	1.12	1.13	0.01	0.28	0.29	1,152
Health Club	5.54	4.28	30.8	0.07	0.05	7.56	7.62	0.05	1.92	1.97	7,581
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

City Park	0.08	0.06	0.46	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	112
Total	6.80	5.11	36.8	0.09	0.06	8.79	8.85	0.06	2.23	2.29	8,846
Annual	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	0.16	0.10	0.70	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.04	148
Health Club	0.93	0.67	4.84	0.01	0.01	1.24	1.25	0.01	0.31	0.32	1,171
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.01	0.01	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	9.91
Total	1.10	0.78	5.58	0.01	0.01	1.41	1.42	0.01	0.36	0.37	1,329

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	25.9
Health Club	—	—	—	—	—	—	—	—	—	—	379
Parking Lot	—	—	—	—	—	—	—	—	—	—	63.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	468
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Day-Care Center	—	—	—	—	—	—	—	—	—	—	25.9
Health Club	—	—	—	—	—	—	—	—	—	—	379
Parking Lot	—	—	—	—	—	—	—	—	—	—	63.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	468
Annual	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	4.28
Health Club	—	—	—	—	—	—	—	—	—	—	62.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	10.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	77.5

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	139
Health Club	0.04	0.72	0.61	< 0.005	0.06	—	0.06	0.06	—	0.06	866
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Total	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	139
Health Club	0.04	0.72	0.61	< 0.005	0.06	—	0.06	0.06	—	0.06	866
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,005
Annual	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.0
Health Club	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	143
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.01	0.15	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	166

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.91	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.54	0.03	3.26	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	13.5
Total	2.58	0.03	3.26	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	13.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.91	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—
Total	2.05	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.35	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.10
Total	0.42	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.10

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	4.28
Health Club	—	—	—	—	—	—	—	—	—	—	38.4

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	6.04
Total	—	—	—	—	—	—	—	—	—	—	48.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	4.28
Health Club	—	—	—	—	—	—	—	—	—	—	38.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	6.04
Total	—	—	—	—	—	—	—	—	—	—	48.7
Annual	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.71
Health Club	—	—	—	—	—	—	—	—	—	—	6.36
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	1.00
Total	—	—	—	—	—	—	—	—	—	—	8.07

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	24.5
Health Club	—	—	—	—	—	—	—	—	—	—	699
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	2.35
Total	—	—	—	—	—	—	—	—	—	—	725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	24.5
Health Club	—	—	—	—	—	—	—	—	—	—	699
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	2.35
Total	—	—	—	—	—	—	—	—	—	—	725
Annual	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	4.06
Health Club	—	—	—	—	—	—	—	—	—	—	116
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.39
Total	—	—	—	—	—	—	—	—	—	—	120

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.04
Health Club	—	—	—	—	—	—	—	—	—	—	0.31
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.35
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.04
Health Club	—	—	—	—	—	—	—	—	—	—	0.31
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.35
Annual	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.01
Health Club	—	—	—	—	—	—	—	—	—	—	0.05
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	4/1/2029	6/30/2029	5.00	65.0	—
Grading	Grading	7/1/2029	12/31/2029	5.00	131	—
Building Construction	Building Construction	1/1/2030	6/30/2034	5.00	1,174	—
Paving	Paving	7/1/2034	9/30/2034	5.00	65.0	—
Architectural Coating	Architectural Coating	4/1/2034	9/30/2034	5.00	130	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	20.0	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	9.62	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	22.5	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	31.5	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	12.3	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	14.5	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.30	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	112,500	37,500	12,493

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	5,000	66.0	0.00	—
Grading	—	—	393	0.00	—
Paving	0.00	0.00	0.00	0.00	4.78

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Day-Care Center	0.00	0%
Health Club	0.00	0%
Parking Lot	2.94	100%
Other Asphalt Surfaces	1.84	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Day-Care Center	476	62.2	58.4	130,441	1,582	311	292	443,950
Health Club	2,140	1,357	1,737	719,376	10,714	6,790	8,696	3,600,697
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	11.3	28.4	31.8	6,086	56.6	142	159	30,464

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	112,500	37,500	12,493

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Day-Care Center	45,832	204	0.0330	0.0040	432,082
Health Club	671,447	204	0.0330	0.0040	2,694,810
Parking Lot	112,186	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Day-Care Center	428,896	0.00
Health Club	3,844,304	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	6,638,113

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Day-Care Center	13.0	—
Health Club	370	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
City Park	1.25	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Day-Care Center	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Day-Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Day-Care Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Day-Care Center	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.9	annual days of extreme heat
Extreme Precipitation	7.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.81	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	3	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.2
AQ-PM	11.5
AQ-DPM	56.2
Drinking Water	17.5
Lead Risk Housing	41.6
Pesticides	28.5
Toxic Releases	44.1
Traffic	63.2
Effect Indicators	—
CleanUp Sites	22.6
Groundwater	30.9
Haz Waste Facilities/Generators	63.1
Impaired Water Bodies	43.8
Solid Waste	52.9
Sensitive Population	—
Asthma	89.2
Cardio-vascular	70.6

Low Birth Weights	34.2
Socioeconomic Factor Indicators	—
Education	43.8
Housing	6.89
Linguistic	35.3
Poverty	49.3
Unemployment	80.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.52085205
Employed	44.86077249
Median HI	57.82112152
Education	—
Bachelor's or higher	44.59129988
High school enrollment	100
Preschool enrollment	28.17913512
Transportation	—
Auto Access	75.69613756
Active commuting	46.82407289
Social	—
2-parent households	4.683690491
Voting	55.85782112
Neighborhood	—
Alcohol availability	80.36699602

Park access	81.35506224
Retail density	72.6806108
Supermarket access	37.5465161
Tree canopy	77.12049275
Housing	—
Homeownership	47.45284229
Housing habitability	52.11086873
Low-inc homeowner severe housing cost burden	87.9892211
Low-inc renter severe housing cost burden	36.31464134
Uncrowded housing	23.08481971
Health Outcomes	—
Insured adults	39.56114462
Arthritis	41.4
Asthma ER Admissions	17.2
High Blood Pressure	64.8
Cancer (excluding skin)	55.0
Asthma	25.7
Coronary Heart Disease	63.8
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	65.9
Life Expectancy at Birth	6.4
Cognitively Disabled	72.6
Physically Disabled	86.7
Heart Attack ER Admissions	31.4
Mental Health Not Good	33.4
Chronic Kidney Disease	64.9
Obesity	27.3

Pedestrian Injuries	63.0
Physical Health Not Good	43.5
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	14.4
Current Smoker	25.4
No Leisure Time for Physical Activity	52.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	4.0
Elderly	89.5
English Speaking	68.9
Foreign-born	18.4
Outdoor Workers	5.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	57.7
Traffic Density	42.3
Traffic Access	23.0
Other Indices	—
Hardship	72.2
Other Decision Support	—
2016 Voting	49.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0

Healthy Places Index Score for Project Location (b)	45.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses estimated from site plan.
Construction: Construction Phases	No demolition. Phase lengths estimated per overall schedule. Building construction includes community center, fencing, lighting, other park structures, and landscaping.
Construction: Off-Road Equipment	Off highway truck = water truck.
Construction: Trips and VMT	297 truck loads of aggregate/asphalt/concrete assumed to be imported during paving, based on 12-inches of uncompressed aggregate/asphalt depth and 16 CY per tandem trailer load.
Construction: On-Road Fugitive Dust	Project site is in an urban area in the City of Vacaville. Public roads in the area are all paved.
Operations: Road Dust	Project site is in an urban area in the City of Vacaville. All public roads in the area are paved.
Construction: Dust From Material Movement	Vegetation/debris export estimated based on phase area.

Centennial Phase 3 R2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Centennial Phase 3 R2
Construction Start Date	4/1/2030
Operational Year	2036
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	34.8
Location	38.37284075181199, -121.96975982295479
County	Solano-Sacramento
City	Vacaville
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	832
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Parking Lot	2.18	Acre	2.18	0.00	0.00	—	—	—
Other Asphalt Surfaces	2.93	Acre	2.93	0.00	0.00	—	—	—
City Park	12.9	Acre	12.9	0.00	528,942	108,725	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.42	28.2	32.2	0.07	1.16	8.08	9.24	1.06	4.05	5.11	8,143
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.20	23.7	30.3	0.07	0.96	3.78	4.73	0.88	1.47	2.35	8,127
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.77	13.6	16.7	0.04	0.55	2.80	3.35	0.51	1.25	1.76	4,304
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	2.48	3.04	0.01	0.10	0.51	0.61	0.09	0.23	0.32	713

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2030	3.42	28.2	32.2	0.07	1.16	8.08	9.24	1.06	4.05	5.11	8,143
2031	0.97	8.20	13.5	0.02	0.24	0.18	0.42	0.22	0.04	0.27	2,616
2032	0.95	7.95	13.4	0.02	0.22	0.18	0.40	0.21	0.04	0.25	2,612
2033	0.93	7.74	13.3	0.02	0.20	0.18	0.38	0.19	0.04	0.23	2,608
2034	0.91	7.59	13.3	0.02	0.19	0.18	0.37	0.18	0.04	0.22	2,605
2035	1.67	8.16	14.3	0.03	0.19	0.35	0.52	0.17	0.09	0.25	2,735
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2030	3.20	23.7	30.3	0.07	0.96	3.78	4.73	0.88	1.47	2.35	8,127
2031	0.97	8.21	13.4	0.02	0.24	0.18	0.42	0.22	0.04	0.27	2,602
2032	0.95	7.96	13.3	0.02	0.22	0.18	0.40	0.21	0.04	0.25	2,596
2033	0.93	7.75	13.2	0.02	0.20	0.18	0.38	0.19	0.04	0.23	2,593
2034	0.91	7.60	13.2	0.02	0.19	0.18	0.37	0.18	0.04	0.22	2,590
2035	0.89	7.42	13.1	0.02	0.18	0.18	0.36	0.17	0.04	0.21	2,587
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2030	1.77	13.6	16.7	0.04	0.55	2.80	3.35	0.51	1.25	1.76	4,304
2031	0.69	5.86	9.53	0.02	0.17	0.13	0.30	0.16	0.03	0.19	1,859
2032	0.68	5.70	9.50	0.02	0.16	0.13	0.29	0.15	0.03	0.18	1,862
2033	0.66	5.53	9.45	0.02	0.15	0.13	0.27	0.13	0.03	0.16	1,854
2034	0.65	5.42	9.43	0.02	0.14	0.13	0.26	0.13	0.03	0.16	1,852
2035	0.73	4.07	6.87	0.01	0.10	0.12	0.22	0.09	0.03	0.12	1,378
Annual	—	—	—	—	—	—	—	—	—	—	—
2030	0.32	2.48	3.04	0.01	0.10	0.51	0.61	0.09	0.23	0.32	713
2031	0.13	1.07	1.74	< 0.005	0.03	0.02	0.05	0.03	0.01	0.03	308
2032	0.12	1.04	1.73	< 0.005	0.03	0.02	0.05	0.03	0.01	0.03	308
2033	0.12	1.01	1.72	< 0.005	0.03	0.02	0.05	0.02	0.01	0.03	307

2034	0.12	0.99	1.72	< 0.005	0.03	0.02	0.05	0.02	0.01	0.03	307
2035	0.13	0.74	1.25	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02	228

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.52	0.05	0.40	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	163
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	0.05	0.39	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	156
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.48	0.03	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	109
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	< 0.005	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	18.1

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.08	0.05	0.40	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	106
Area	0.44	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	46.9
Water	—	—	—	—	—	—	—	—	—	—	7.85
Waste	—	—	—	—	—	—	—	—	—	—	2.09

Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.52	0.05	0.40	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	163
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.05	0.39	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	98.7
Area	0.44	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	46.9
Water	—	—	—	—	—	—	—	—	—	—	7.85
Waste	—	—	—	—	—	—	—	—	—	—	2.09
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.51	0.05	0.39	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	156
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	0.03	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	52.5
Area	0.44	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	46.9
Water	—	—	—	—	—	—	—	—	—	—	7.85
Waste	—	—	—	—	—	—	—	—	—	—	2.09
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.48	0.03	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	109
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	< 0.005	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	8.69
Area	0.08	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	7.77
Water	—	—	—	—	—	—	—	—	—	—	1.30
Waste	—	—	—	—	—	—	—	—	—	—	0.35
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.09	< 0.005	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	18.1

3. Construction Emissions Details

3.1. Site Preparation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.34	27.2	31.3	0.06	1.14	—	1.14	1.05	—	1.05	6,653
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	4.84	5.58	0.01	0.20	—	0.20	0.19	—	0.19	1,185
Dust From Material Movement	—	—	—	—	—	1.37	1.37	—	0.70	0.70	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.88	1.02	< 0.005	0.04	—	0.04	0.03	—	0.03	196
Dust From Material Movement	—	—	—	—	—	0.25	0.25	—	0.13	0.13	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.03	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.97	0.24	0.01	0.02	0.25	0.27	0.02	0.07	0.09	859
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	27.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	0.04	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.02	153
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	25.3

3.3. Grading (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.14	23.6	29.8	0.07	0.96	—	0.96	0.88	—	0.88	7,958
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.14	23.6	29.8	0.07	0.96	—	0.96	0.88	—	0.88	7,958
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	8.54	10.8	0.03	0.35	—	0.35	0.32	—	0.32	2,878
Dust From Material Movement	—	—	—	—	—	1.30	1.30	—	0.52	0.52	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.56	1.96	< 0.005	0.06	—	0.06	0.06	—	0.06	476
Dust From Material Movement	—	—	—	—	—	0.24	0.24	—	0.09	0.09	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.70	0.00	0.00	0.19	0.19	0.00	0.04	0.04	186
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.58	0.00	0.00	0.19	0.19	0.00	0.04	0.04	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.21	0.00	0.00	0.07	0.07	0.00	0.02	0.02	61.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	5.80	9.18	0.02	0.17	—	0.17	0.16	—	0.16	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.06	1.67	< 0.005	0.03	—	0.03	0.03	—	0.03	284

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.59	0.00	0.00	0.17	0.17	0.00	0.04	0.04	162
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	48.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.49	0.00	0.00	0.17	0.17	0.00	0.04	0.04	148
Vendor	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	48.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.34	0.00	0.00	0.12	0.12	0.00	0.03	0.03	107
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	34.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	17.7
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	5.64	9.16	0.02	0.16	—	0.16	0.15	—	0.15	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.03	1.67	< 0.005	0.03	—	0.03	0.03	—	0.03	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.56	0.00	0.00	0.17	0.17	0.00	0.04	0.04	160
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	47.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.46	0.00	0.00	0.17	0.17	0.00	0.04	0.04	144
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	47.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.32	0.00	0.00	0.12	0.12	0.00	0.03	0.03	105
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	33.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	17.4
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	5.48	9.13	0.02	0.15	—	0.15	0.13	—	0.13	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	1.00	1.67	< 0.005	0.03	—	0.03	0.02	—	0.02	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.53	0.00	0.00	0.17	0.17	0.00	0.04	0.04	157

Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	45.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.44	0.00	0.00	0.17	0.17	0.00	0.04	0.04	142
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	45.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.31	0.00	0.00	0.12	0.12	0.00	0.03	0.03	104
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	32.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	17.2
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.40
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	5.37	9.12	0.02	0.14	—	0.14	0.13	—	0.13	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.98	1.66	< 0.005	0.03	—	0.03	0.02	—	0.02	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.50	0.00	0.00	0.17	0.17	0.00	0.04	0.04	155
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	44.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.42	0.00	0.00	0.17	0.17	0.00	0.04	0.04	140
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	44.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.29	0.00	0.00	0.12	0.12	0.00	0.03	0.03	102
Vendor	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	31.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.9
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.22
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.60	4.49	0.01	0.06	—	0.06	0.06	—	0.06	852
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.47	0.82	< 0.005	0.01	—	0.01	0.01	—	0.01	141
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	154
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	42.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.03	0.40	0.00	0.00	0.17	0.17	0.00	0.04	0.04	139
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	42.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.14	0.00	0.00	0.06	0.06	0.00	0.01	0.01	50.2
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	15.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.31
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.51
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	5.73	9.80	0.01	0.15	—	0.15	0.14	—	0.14	1,516
Paving	0.21	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	1.02	1.75	< 0.005	0.03	—	0.03	0.02	—	0.02	270
Paving	0.04	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	44.7
Paving	0.01	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.36	0.00	0.00	0.12	0.12	0.00	0.03	0.03	115
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.81	0.20	0.01	0.02	0.23	0.24	0.02	0.06	0.08	698
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	0.01	0.01	18.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.15	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	124
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	20.6

3.17. Architectural Coating (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	134
Architectural Coatings	0.68	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	47.7
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.90
Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.08	0.05	0.40	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	106
Total	0.08	0.05	0.40	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.07	0.05	0.39	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	98.7
Total	0.07	0.05	0.39	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	98.7
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.01	< 0.005	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	8.69
Total	0.01	< 0.005	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	8.69

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	46.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	46.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	46.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	46.9
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	7.77
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	7.77

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.42	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.44	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.42	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Total	0.44	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.08	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.08	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	7.85
Total	—	—	—	—	—	—	—	—	—	—	7.85
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	7.85
Total	—	—	—	—	—	—	—	—	—	—	7.85
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	1.30
Total	—	—	—	—	—	—	—	—	—	—	1.30

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	2.09

Total	—	—	—	—	—	—	—	—	—	—	2.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	2.09
Total	—	—	—	—	—	—	—	—	—	—	2.09
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.35
Total	—	—	—	—	—	—	—	—	—	—	0.35

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	4/1/2030	6/30/2030	5.00	65.0	—
Grading	Grading	7/1/2030	12/31/2030	5.00	132	—
Building Construction	Building Construction	1/1/2031	6/30/2035	5.00	1,173	—
Paving	Paving	7/1/2035	9/30/2035	5.00	65.0	—
Architectural Coating	Architectural Coating	4/1/2035	9/30/2035	5.00	130	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	20.0	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	13.5	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	22.5	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	20.0	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	2.00	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	12.2	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	7,020	2,340	13,355

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	7,000	97.5	0.00	—
Grading	—	—	396	0.00	—
Paving	0.00	0.00	0.00	0.00	5.11

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Parking Lot	2.18	100%
Other Asphalt Surfaces	2.93	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	10.1	25.3	28.2	5,411	50.3	126	141	27,082

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

0	0.00	7,020	2,340	13,355

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	83,186	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	8,627,607

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
City Park	1.11	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.9	annual days of extreme heat

Extreme Precipitation	7.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.81	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	3	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.2
AQ-PM	11.5
AQ-DPM	56.2
Drinking Water	17.5
Lead Risk Housing	41.6
Pesticides	28.5

Toxic Releases	44.1
Traffic	63.2
Effect Indicators	—
CleanUp Sites	22.6
Groundwater	30.9
Haz Waste Facilities/Generators	63.1
Impaired Water Bodies	43.8
Solid Waste	52.9
Sensitive Population	—
Asthma	89.2
Cardio-vascular	70.6
Low Birth Weights	34.2
Socioeconomic Factor Indicators	—
Education	43.8
Housing	6.89
Linguistic	35.3
Poverty	49.3
Unemployment	80.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.52085205
Employed	44.86077249
Median HI	57.82112152
Education	—

Bachelor's or higher	44.59129988
High school enrollment	100
Preschool enrollment	28.17913512
Transportation	—
Auto Access	75.69613756
Active commuting	46.82407289
Social	—
2-parent households	4.683690491
Voting	55.85782112
Neighborhood	—
Alcohol availability	80.36699602
Park access	81.35506224
Retail density	72.6806108
Supermarket access	37.5465161
Tree canopy	77.12049275
Housing	—
Homeownership	47.45284229
Housing habitability	52.11086873
Low-inc homeowner severe housing cost burden	87.9892211
Low-inc renter severe housing cost burden	36.31464134
Uncrowded housing	23.08481971
Health Outcomes	—
Insured adults	39.56114462
Arthritis	41.4
Asthma ER Admissions	17.2
High Blood Pressure	64.8
Cancer (excluding skin)	55.0

Asthma	25.7
Coronary Heart Disease	63.8
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	65.9
Life Expectancy at Birth	6.4
Cognitively Disabled	72.6
Physically Disabled	86.7
Heart Attack ER Admissions	31.4
Mental Health Not Good	33.4
Chronic Kidney Disease	64.9
Obesity	27.3
Pedestrian Injuries	63.0
Physical Health Not Good	43.5
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	14.4
Current Smoker	25.4
No Leisure Time for Physical Activity	52.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	4.0
Elderly	89.5
English Speaking	68.9
Foreign-born	18.4
Outdoor Workers	5.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	57.7
Traffic Density	42.3
Traffic Access	23.0
Other Indices	—
Hardship	72.2
Other Decision Support	—
2016 Voting	49.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0
Healthy Places Index Score for Project Location (b)	45.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Land uses and areas estimated from site plan.
Construction: Construction Phases	No demolition. Construction activities adjusted to fit overall schedule. Building construction = all structures, fencing, lighting, and landscaping.
Construction: Off-Road Equipment	Off highway truck = water truck.
Construction: Trips and VMT	Haul trips added to paving for import of 523 truckloads of aggregate/asphalt/concrete. Assuming 16 CY per tandem trailer load. Worker and vendor trips added to park construction assuming 10 workers per day and 1 vendor delivery.
Construction: On-Road Fugitive Dust	Project site is in an urban area in the City of Vacaville. All public roads in the area are paved.
Operations: Road Dust	Project site is in an urban area in the City of Vacaville. All public roads in the area are paved.

Centennial Phase 4 R2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Centennial Phase 4 R2
Construction Start Date	4/1/2035
Operational Year	2041
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	34.8
Location	38.375280827555656, -121.97309597288955
County	Solano-Sacramento
City	Vacaville
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	832
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Parking Lot	2.74	Acre	2.74	0.00	0.00	—	—	—
Other Asphalt Surfaces	2.54	Acre	2.54	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	19.9	Acre	19.9	0.00	0.00	—	—	—
City Park	5.79	Acre	5.79	0.00	249,525	82,500	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.31	21.2	28.0	0.07	0.80	7.97	8.78	0.74	4.02	4.76	8,130
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.82	18.3	27.9	0.07	0.68	3.78	4.45	0.62	1.47	2.09	8,114
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.53	10.3	14.7	0.04	0.39	2.77	3.16	0.36	1.24	1.60	4,200
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28	1.89	2.68	0.01	0.07	0.51	0.58	0.06	0.23	0.29	695

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2035	2.92	21.2	28.0	0.07	0.80	7.97	8.78	0.74	4.02	4.76	8,130
2036	0.88	7.27	13.1	0.02	0.17	0.20	0.37	0.16	0.05	0.21	2,670
2037	0.87	7.14	13.0	0.02	0.16	0.20	0.36	0.15	0.05	0.20	2,668
2038	0.85	7.04	12.9	0.02	0.15	0.20	0.36	0.14	0.05	0.19	2,665
2039	0.84	6.92	12.9	0.02	0.15	0.20	0.35	0.14	0.05	0.18	2,663
2040	3.31	7.59	13.9	0.03	0.15	0.43	0.56	0.14	0.11	0.23	2,796
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2035	2.82	18.3	27.9	0.07	0.68	3.78	4.45	0.62	1.47	2.09	8,114
2036	0.87	7.29	13.0	0.02	0.17	0.20	0.37	0.16	0.05	0.21	2,656
2037	0.86	7.15	12.9	0.02	0.16	0.20	0.36	0.15	0.05	0.20	2,653
2038	0.85	7.06	12.9	0.02	0.15	0.20	0.36	0.14	0.05	0.19	2,651
2039	0.84	6.94	12.8	0.02	0.15	0.20	0.35	0.14	0.05	0.18	2,649
2040	0.83	6.87	12.8	0.02	0.14	0.20	0.35	0.13	0.05	0.18	2,648
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2035	1.53	10.3	14.7	0.04	0.39	2.77	3.16	0.36	1.24	1.60	4,200
2036	0.63	5.22	9.32	0.02	0.12	0.14	0.26	0.11	0.03	0.15	1,904
2037	0.61	5.11	9.21	0.02	0.11	0.14	0.26	0.11	0.03	0.14	1,897
2038	0.61	5.04	9.17	0.02	0.11	0.14	0.25	0.10	0.03	0.14	1,895
2039	0.60	4.95	9.13	0.02	0.11	0.14	0.25	0.10	0.03	0.13	1,894
2040	1.31	3.84	6.76	0.01	0.08	0.15	0.22	0.07	0.04	0.10	1,439
Annual	—	—	—	—	—	—	—	—	—	—	—
2035	0.28	1.89	2.68	0.01	0.07	0.51	0.58	0.06	0.23	0.29	695
2036	0.11	0.95	1.70	< 0.005	0.02	0.03	0.05	0.02	0.01	0.03	315
2037	0.11	0.93	1.68	< 0.005	0.02	0.03	0.05	0.02	0.01	0.03	314

2038	0.11	0.92	1.67	< 0.005	0.02	0.03	0.05	0.02	0.01	0.02	314
2039	0.11	0.90	1.67	< 0.005	0.02	0.03	0.05	0.02	0.01	0.02	314
2040	0.24	0.70	1.23	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	238

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	110
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	107
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	86.7
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	14.3

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	45.6
Area	0.33	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	59.0
Water	—	—	—	—	—	—	—	—	—	—	4.16

Waste	—	—	—	—	—	—	—	—	—	—	0.94
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.36	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	110
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	42.4
Area	0.33	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	59.0
Water	—	—	—	—	—	—	—	—	—	—	4.16
Waste	—	—	—	—	—	—	—	—	—	—	0.94
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.36	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	22.6
Area	0.33	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	59.0
Water	—	—	—	—	—	—	—	—	—	—	4.16
Waste	—	—	—	—	—	—	—	—	—	—	0.94
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.35	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	86.7
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.74
Area	0.06	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	9.77
Water	—	—	—	—	—	—	—	—	—	—	0.69
Waste	—	—	—	—	—	—	—	—	—	—	0.16
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.06	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	14.3

3. Construction Emissions Details

3.1. Site Preparation (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.87	20.6	25.8	0.06	0.79	—	0.79	0.73	—	0.73	6,653
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	3.68	4.59	0.01	0.14	—	0.14	0.13	—	0.13	1,185
Dust From Material Movement	—	—	—	—	—	1.37	1.37	—	0.70	0.70	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.67	0.84	< 0.005	0.03	—	0.03	0.02	—	0.02	196
Dust From Material Movement	—	—	—	—	—	0.25	0.25	—	0.13	0.13	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.50	0.13	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	431
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	25.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	76.7
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	12.7

3.3. Grading (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.77	18.3	27.5	0.07	0.68	—	0.68	0.62	—	0.62	7,958
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.77	18.3	27.5	0.07	0.68	—	0.68	0.62	—	0.62	7,958
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	6.56	9.86	0.03	0.24	—	0.24	0.22	—	0.22	2,856
Dust From Material Movement	—	—	—	—	—	1.29	1.29	—	0.51	0.51	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.20	1.80	< 0.005	0.04	—	0.04	0.04	—	0.04	473
Dust From Material Movement	—	—	—	—	—	0.24	0.24	—	0.09	0.09	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.54	0.00	0.00	0.19	0.19	0.00	0.04	0.04	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.45	0.00	0.00	0.19	0.19	0.00	0.04	0.04	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.16	0.00	0.00	0.07	0.07	0.00	0.02	0.02	57.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	9.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	5.10	9.03	0.02	0.12	—	0.12	0.11	—	0.11	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.93	1.65	< 0.005	0.02	—	0.02	0.02	—	0.02	285

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.46	0.00	0.00	0.17	0.17	0.00	0.04	0.04	152
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.13	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.38	0.00	0.00	0.17	0.17	0.00	0.04	0.04	137
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.14	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	113
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.27	0.00	0.00	0.12	0.12	0.00	0.03	0.03	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.10	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	81.2
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	13.4

3.7. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	4.99	8.93	0.02	0.11	—	0.11	0.10	—	0.10	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.91	1.63	< 0.005	0.02	—	0.02	0.02	—	0.02	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.45	0.00	0.00	0.17	0.17	0.00	0.04	0.04	151
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.13	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	112
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.36	0.00	0.00	0.17	0.17	0.00	0.04	0.04	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.14	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	112
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.26	0.00	0.00	0.12	0.12	0.00	0.03	0.03	99.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.10	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	80.1
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	13.3

3.9. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	4.92	8.90	0.02	0.11	—	0.11	0.10	—	0.10	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.90	1.62	< 0.005	0.02	—	0.02	0.02	—	0.02	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.44	0.00	0.00	0.17	0.17	0.00	0.04	0.04	149

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.13	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	111
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.35	0.00	0.00	0.17	0.17	0.00	0.04	0.04	135
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.14	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	111
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.00	0.12	0.12	0.00	0.03	0.03	98.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.10	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	79.2
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	13.1

3.11. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	4.84	8.86	0.02	0.10	—	0.10	0.10	—	0.10	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.88	1.62	< 0.005	0.02	—	0.02	0.02	—	0.02	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.42	0.00	0.00	0.17	0.17	0.00	0.04	0.04	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.13	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	110
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.34	0.00	0.00	0.17	0.17	0.00	0.04	0.04	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.14	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	110
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.24	0.00	0.00	0.12	0.12	0.00	0.03	0.03	97.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.10	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	78.6
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	13.0

3.13. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	2.39	4.41	0.01	0.05	—	0.05	0.05	—	0.05	857
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.44	0.81	< 0.005	0.01	—	0.01	0.01	—	0.01	142
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.41	0.00	0.00	0.17	0.17	0.00	0.04	0.04	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.13	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.02	0.34	0.00	0.00	0.17	0.17	0.00	0.04	0.04	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.14	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	109
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.06	0.06	0.00	0.01	0.01	48.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	38.9
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.44

3.15. Paving (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	5.27	9.75	0.01	0.11	—	0.11	0.10	—	0.10	1,516
Paving	0.21	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.94	1.74	< 0.005	0.02	—	0.02	0.02	—	0.02	270
Paving	0.04	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.17	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	44.7
Paving	0.01	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.31	0.00	0.00	0.12	0.12	0.00	0.03	0.03	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.04	0.26	0.01	0.02	0.30	0.33	0.01	0.08	0.10	894
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	0.01	0.01	18.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.19	0.05	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	159
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	26.4

3.17. Architectural Coating (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	134
Architectural Coatings	2.39	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	47.7
Architectural Coatings	0.85	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.90
Architectural Coatings	0.16	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.03	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	45.6
Total	0.03	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	45.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

City Park	0.03	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	42.4
Total	0.03	0.02	0.16	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	42.4
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.74
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.74

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	59.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	59.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	59.0

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	59.0
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	9.77
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	9.77

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.25	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.33	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.25	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	—	—	—	—	—	—	—	—	—	—
Total	0.33	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.05	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.06	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	4.16
Total	—	—	—	—	—	—	—	—	—	—	4.16
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	4.16
Total	—	—	—	—	—	—	—	—	—	—	4.16
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.69
Total	—	—	—	—	—	—	—	—	—	—	0.69

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.94
Total	—	—	—	—	—	—	—	—	—	—	0.94
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.94
Total	—	—	—	—	—	—	—	—	—	—	0.94
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.16
Total	—	—	—	—	—	—	—	—	—	—	0.16

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	4/1/2035	6/30/2035	5.00	65.0	—
Grading	Grading	7/1/2035	12/31/2035	5.00	131	—
Building Construction	Building Construction	1/1/2036	6/30/2040	5.00	1,174	—
Paving	Paving	7/1/2040	9/30/2040	5.00	65.0	—
Architectural Coating	Architectural Coating	4/1/2040	9/30/2040	5.00	130	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20

Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	20.0	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	7.51	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	22.5	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	20.0	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	8.40	HHDT,MHDT
Building Construction	Hauling	2.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	16.4	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,350	450	65,889

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	3,900	131	0.00	—
Grading	—	—	393	0.00	—
Paving	0.00	0.00	0.00	0.00	25.2

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Parking Lot	2.74	100%
Other Asphalt Surfaces	2.54	100%
Other Non-Asphalt Surfaces	19.9	0%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2040	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	4.52	11.3	12.7	2,430	22.6	56.8	63.5	12,165

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,350	450	65,889

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	104,554	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
City Park	0.00	4,567,280

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—
City Park	0.50	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	8.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	7.75	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	3	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.2
AQ-PM	11.5
AQ-DPM	56.2
Drinking Water	17.5
Lead Risk Housing	41.6
Pesticides	28.5
Toxic Releases	44.1
Traffic	63.2
Effect Indicators	—
CleanUp Sites	22.6
Groundwater	30.9
Haz Waste Facilities/Generators	63.1
Impaired Water Bodies	43.8
Solid Waste	52.9
Sensitive Population	—
Asthma	89.2
Cardio-vascular	70.6

Low Birth Weights	34.2
Socioeconomic Factor Indicators	—
Education	43.8
Housing	6.89
Linguistic	35.3
Poverty	49.3
Unemployment	80.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.52085205
Employed	44.86077249
Median HI	57.82112152
Education	—
Bachelor's or higher	44.59129988
High school enrollment	100
Preschool enrollment	28.17913512
Transportation	—
Auto Access	75.69613756
Active commuting	46.82407289
Social	—
2-parent households	4.683690491
Voting	55.85782112
Neighborhood	—
Alcohol availability	80.36699602

Park access	81.35506224
Retail density	72.6806108
Supermarket access	37.5465161
Tree canopy	77.12049275
Housing	—
Homeownership	47.45284229
Housing habitability	52.11086873
Low-inc homeowner severe housing cost burden	87.9892211
Low-inc renter severe housing cost burden	36.31464134
Uncrowded housing	23.08481971
Health Outcomes	—
Insured adults	39.56114462
Arthritis	41.4
Asthma ER Admissions	17.2
High Blood Pressure	64.8
Cancer (excluding skin)	55.0
Asthma	25.7
Coronary Heart Disease	63.8
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	65.9
Life Expectancy at Birth	6.4
Cognitively Disabled	72.6
Physically Disabled	86.7
Heart Attack ER Admissions	31.4
Mental Health Not Good	33.4
Chronic Kidney Disease	64.9
Obesity	27.3

Pedestrian Injuries	63.0
Physical Health Not Good	43.5
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	14.4
Current Smoker	25.4
No Leisure Time for Physical Activity	52.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	4.0
Elderly	89.5
English Speaking	68.9
Foreign-born	18.4
Outdoor Workers	5.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	57.7
Traffic Density	42.3
Traffic Access	23.0
Other Indices	—
Hardship	72.2
Other Decision Support	—
2016 Voting	49.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0

Healthy Places Index Score for Project Location (b)	45.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses and areas estimated from site plan.
Construction: Construction Phases	No demolition. Construction activities adjusted to fit overall schedule. Building construction = all structures, fencing, lighting, and landscaping.
Construction: Off-Road Equipment	Off highway truck = water truck.
Construction: Trips and VMT	Haul trips added to paving for import of 582 loads of aggregate/asphalt/concrete. Assuming 16 CY per tandem trailer load. Building trips estimated for construction trips of up to 10 workers, and one vendor delivery per day.
Construction: On-Road Fugitive Dust	Project site is in an urban area in the City of Vacaville. All public roads in the area are paved.
Operations: Road Dust	Project site is in an urban area in the City of Vacaville. All public roads in the area are paved.
Construction: Dust From Material Movement	Vegetation/debris export estimated based on phase area.

Centennial Phase 5 R2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Centennial Phase 5 R2
Construction Start Date	4/1/2040
Operational Year	2046
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	34.8
Location	38.378349067066324, -121.97294613613434
County	Solano-Sacramento
City	Vacaville
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	832
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Parking Lot	1.27	Acre	1.27	0.00	0.00	—	—	—
Other Asphalt Surfaces	2.20	Acre	2.20	0.00	0.00	—	—	—
City Park	29.5	Acre	29.5	0.00	1,286,317	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.61	18.2	25.8	0.07	0.65	8.17	8.82	0.59	4.07	4.66	8,123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.52	14.6	25.7	0.07	0.52	3.78	4.30	0.48	1.47	1.95	8,107
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.37	8.47	13.4	0.04	0.30	2.81	3.11	0.28	1.25	1.53	4,295
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	1.55	2.44	0.01	0.06	0.51	0.57	0.05	0.23	0.28	711

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2040	2.61	18.2	25.8	0.07	0.65	8.17	8.82	0.59	4.07	4.66	8,123
2041	0.83	6.71	12.8	0.02	0.14	0.18	0.32	0.13	0.04	0.17	2,589
2042	0.82	6.66	12.7	0.02	0.13	0.18	0.31	0.12	0.04	0.17	2,588
2043	0.82	6.61	12.7	0.02	0.13	0.18	0.31	0.12	0.04	0.16	2,586
2044	0.81	6.54	12.6	0.02	0.12	0.18	0.30	0.11	0.04	0.16	2,585
2045	1.37	7.22	13.6	0.03	0.12	0.32	0.42	0.11	0.08	0.17	2,718
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2040	2.52	14.6	25.7	0.07	0.52	3.78	4.30	0.48	1.47	1.95	8,107
2041	0.83	6.72	12.7	0.02	0.14	0.18	0.32	0.13	0.04	0.17	2,575
2042	0.82	6.67	12.7	0.02	0.13	0.18	0.31	0.12	0.04	0.17	2,574
2043	0.82	6.61	12.6	0.02	0.13	0.18	0.31	0.12	0.04	0.16	2,573
2044	0.81	6.54	12.6	0.02	0.12	0.18	0.30	0.11	0.04	0.16	2,572
2045	0.80	6.48	12.5	0.02	0.12	0.18	0.30	0.11	0.04	0.15	2,571
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2040	1.37	8.47	13.4	0.04	0.30	2.81	3.11	0.28	1.25	1.53	4,295
2041	0.59	4.79	9.06	0.02	0.10	0.13	0.22	0.09	0.03	0.12	1,841
2042	0.59	4.76	9.05	0.02	0.10	0.13	0.22	0.09	0.03	0.12	1,840
2043	0.58	4.72	9.00	0.02	0.09	0.13	0.22	0.09	0.03	0.12	1,839
2044	0.58	4.69	8.99	0.02	0.09	0.13	0.21	0.08	0.03	0.11	1,844
2045	0.60	3.59	6.61	0.01	0.06	0.12	0.18	0.05	0.03	0.08	1,350
Annual	—	—	—	—	—	—	—	—	—	—	—
2040	0.25	1.55	2.44	0.01	0.06	0.51	0.57	0.05	0.23	0.28	711
2041	0.11	0.87	1.65	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02	305
2042	0.11	0.87	1.65	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02	305
2043	0.11	0.86	1.64	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02	305

2044	0.11	0.86	1.64	< 0.005	0.02	0.02	0.04	0.01	0.01	0.02	305
2045	0.11	0.66	1.21	< 0.005	0.01	0.02	0.03	0.01	0.01	0.02	223

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.41	1.84	15.5	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,499
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.27	2.14	14.9	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,189
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.56	0.59	4.22	0.01	0.01	1.30	1.31	0.01	0.33	0.34	1,299
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28	0.11	0.77	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	215

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.58	1.84	15.5	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,451
Area	0.83	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	27.4
Water	—	—	—	—	—	—	—	—	—	—	15.3
Waste	—	—	—	—	—	—	—	—	—	—	4.79

Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	3.41	1.84	15.5	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,499
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.44	2.14	14.9	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,142
Area	0.83	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	27.4
Water	—	—	—	—	—	—	—	—	—	—	15.3
Waste	—	—	—	—	—	—	—	—	—	—	4.79
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	3.27	2.14	14.9	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,189
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.72	0.59	4.22	0.01	0.01	1.30	1.31	0.01	0.33	0.34	1,252
Area	0.83	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	27.4
Water	—	—	—	—	—	—	—	—	—	—	15.3
Waste	—	—	—	—	—	—	—	—	—	—	4.79
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	1.56	0.59	4.22	0.01	0.01	1.30	1.31	0.01	0.33	0.34	1,299
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.13	0.11	0.77	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	207
Area	0.15	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	4.53
Water	—	—	—	—	—	—	—	—	—	—	2.53
Waste	—	—	—	—	—	—	—	—	—	—	0.79
Refrig.	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.28	0.11	0.77	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	215

3. Construction Emissions Details

3.1. Site Preparation (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	17.0	22.7	0.06	0.62	—	0.62	0.57	—	0.57	6,653
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	3.03	4.04	0.01	0.11	—	0.11	0.10	—	0.10	1,185
Dust From Material Movement	—	—	—	—	—	1.37	1.37	—	0.70	0.70	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.55	0.74	< 0.005	0.02	—	0.02	0.02	—	0.02	196
Dust From Material Movement	—	—	—	—	—	0.25	0.25	—	0.13	0.13	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.41	0.00	0.00	0.17	0.17	0.00	0.04	0.04	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.14	0.29	0.01	0.02	0.33	0.36	0.02	0.09	0.11	981
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	24.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.21	0.05	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	175
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	4.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	28.9

3.3. Grading (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.48	14.5	25.3	0.07	0.52	—	0.52	0.48	—	0.48	7,958
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.48	14.5	25.3	0.07	0.52	—	0.52	0.48	—	0.48	7,958
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	5.22	9.10	0.03	0.19	—	0.19	0.17	—	0.17	2,856
Dust From Material Movement	—	—	—	—	—	1.29	1.29	—	0.51	0.51	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.95	1.66	< 0.005	0.03	—	0.03	0.03	—	0.03	473
Dust From Material Movement	—	—	—	—	—	0.24	0.24	—	0.09	0.09	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.46	0.00	0.00	0.19	0.19	0.00	0.04	0.04	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.38	0.00	0.00	0.19	0.19	0.00	0.04	0.04	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.13	0.00	0.00	0.07	0.07	0.00	0.02	0.02	54.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	9.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	4.75	8.81	0.02	0.10	—	0.10	0.09	—	0.09	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.87	1.61	< 0.005	0.02	—	0.02	0.02	—	0.02	284

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.40	0.00	0.00	0.17	0.17	0.00	0.04	0.04	146
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	37.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.33	0.00	0.00	0.17	0.17	0.00	0.04	0.04	133
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	37.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.23	0.00	0.00	0.12	0.12	0.00	0.03	0.03	96.5
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	26.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.0
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.41
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	4.72	8.81	0.02	0.10	—	0.10	0.09	—	0.09	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.86	1.61	< 0.005	0.02	—	0.02	0.02	—	0.02	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.40	0.00	0.00	0.17	0.17	0.00	0.04	0.04	146
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	36.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.32	0.00	0.00	0.17	0.17	0.00	0.04	0.04	132
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	36.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.23	0.00	0.00	0.12	0.12	0.00	0.03	0.03	96.1
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	26.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	15.9
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	4.68	8.77	0.02	0.09	—	0.09	0.09	—	0.09	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.85	1.60	< 0.005	0.02	—	0.02	0.02	—	0.02	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.39	0.00	0.00	0.17	0.17	0.00	0.04	0.04	145

Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	36.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.32	0.00	0.00	0.17	0.17	0.00	0.04	0.04	131
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	36.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.22	0.00	0.00	0.12	0.12	0.00	0.03	0.03	95.7
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	25.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	15.8
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.28
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	4.64	8.76	0.02	0.09	—	0.09	0.08	—	0.08	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.85	1.60	< 0.005	0.02	—	0.02	0.01	—	0.01	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.39	0.00	0.00	0.17	0.17	0.00	0.04	0.04	145
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	35.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.31	0.00	0.00	0.17	0.17	0.00	0.04	0.04	131
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	35.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.22	0.00	0.00	0.12	0.12	0.00	0.03	0.03	95.6
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	25.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	15.8
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.23
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	2.27	4.30	0.01	0.04	—	0.04	0.04	—	0.04	852
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.41	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	141
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.38	0.00	0.00	0.17	0.17	0.00	0.04	0.04	144
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	35.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.02	0.31	0.00	0.00	0.17	0.17	0.00	0.04	0.04	131
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	35.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.06	0.06	0.00	0.01	0.01	47.2
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	12.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.81
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.07
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	5.07	9.71	0.01	0.08	—	0.08	0.07	—	0.07	1,516
Paving	0.14	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.90	1.73	< 0.005	0.01	—	0.01	0.01	—	0.01	270
Paving	0.02	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.16	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	44.7
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.29	0.00	0.00	0.12	0.12	0.00	0.03	0.03	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.67	0.17	< 0.005	0.01	0.20	0.21	0.01	0.05	0.06	577
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	0.01	0.01	17.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.13	0.03	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	103
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.94
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	17.0

3.17. Architectural Coating (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	134
Architectural Coatings	0.48	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	47.7
Architectural Coatings	0.17	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.90
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	2.58	1.84	15.5	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,451
Total	2.58	1.84	15.5	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,451
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	2.44	2.14	14.9	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,142
Total	2.44	2.14	14.9	0.04	0.02	4.45	4.48	0.02	1.13	1.15	4,142
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.13	0.11	0.77	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	207
Total	0.13	0.11	0.77	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	207

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	27.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	27.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	27.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	27.4
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	4.53
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	4.53

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.82	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.83	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.82	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Total	0.83	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.15	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.15	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	15.3
Total	—	—	—	—	—	—	—	—	—	—	15.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	15.3
Total	—	—	—	—	—	—	—	—	—	—	15.3
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	2.53
Total	—	—	—	—	—	—	—	—	—	—	2.53

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	4.79

Total	—	—	—	—	—	—	—	—	—	—	4.79
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	4.79
Total	—	—	—	—	—	—	—	—	—	—	4.79
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.79
Total	—	—	—	—	—	—	—	—	—	—	0.79

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

City Park	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	4/1/2040	6/30/2040	5.00	65.0	—
Grading	Grading	7/1/2040	12/31/2040	5.00	131	—
Building Construction	Building Construction	1/1/2041	6/30/2045	5.00	1,174	—
Paving	Paving	7/1/2045	9/30/2045	5.00	65.0	—
Architectural Coating	Architectural Coating	4/1/2045	9/30/2045	5.00	130	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	20.0	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	18.0	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	22.5	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	20.0	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	2.00	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	10.8	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	5,205	1,735	9,069

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	12,500	131	0.00	—
Grading	—	—	264	0.00	—
Paving	0.00	0.00	0.00	0.00	3.47

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Parking Lot	1.27	100%
Other Asphalt Surfaces	2.20	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	23.0	1,258	1,262	137,394	115	6,297	6,316	687,701

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

0	0.00	5,205	1,735	9,069

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	48,461	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	16,768,459

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
City Park	2.54	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat

Extreme Precipitation	8.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	7.75	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	3	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.2
AQ-PM	11.5
AQ-DPM	56.2
Drinking Water	17.5
Lead Risk Housing	41.6
Pesticides	28.5

Toxic Releases	44.1
Traffic	63.2
Effect Indicators	—
CleanUp Sites	22.6
Groundwater	30.9
Haz Waste Facilities/Generators	63.1
Impaired Water Bodies	43.8
Solid Waste	52.9
Sensitive Population	—
Asthma	89.2
Cardio-vascular	70.6
Low Birth Weights	34.2
Socioeconomic Factor Indicators	—
Education	43.8
Housing	6.89
Linguistic	35.3
Poverty	49.3
Unemployment	80.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.52085205
Employed	44.86077249
Median HI	57.82112152
Education	—

Bachelor's or higher	44.59129988
High school enrollment	100
Preschool enrollment	28.17913512
Transportation	—
Auto Access	75.69613756
Active commuting	46.82407289
Social	—
2-parent households	4.683690491
Voting	55.85782112
Neighborhood	—
Alcohol availability	80.36699602
Park access	81.35506224
Retail density	72.6806108
Supermarket access	37.5465161
Tree canopy	77.12049275
Housing	—
Homeownership	47.45284229
Housing habitability	52.11086873
Low-inc homeowner severe housing cost burden	87.9892211
Low-inc renter severe housing cost burden	36.31464134
Uncrowded housing	23.08481971
Health Outcomes	—
Insured adults	39.56114462
Arthritis	41.4
Asthma ER Admissions	17.2
High Blood Pressure	64.8
Cancer (excluding skin)	55.0

Asthma	25.7
Coronary Heart Disease	63.8
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	65.9
Life Expectancy at Birth	6.4
Cognitively Disabled	72.6
Physically Disabled	86.7
Heart Attack ER Admissions	31.4
Mental Health Not Good	33.4
Chronic Kidney Disease	64.9
Obesity	27.3
Pedestrian Injuries	63.0
Physical Health Not Good	43.5
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	14.4
Current Smoker	25.4
No Leisure Time for Physical Activity	52.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	4.0
Elderly	89.5
English Speaking	68.9
Foreign-born	18.4
Outdoor Workers	5.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	57.7
Traffic Density	42.3
Traffic Access	23.0
Other Indices	—
Hardship	72.2
Other Decision Support	—
2016 Voting	49.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0
Healthy Places Index Score for Project Location (b)	45.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Land uses and areas estimated from site plan.
Construction: Construction Phases	Construction activities adjusted to fit overall schedule. No demolition is required. Building construction = all structures, fencing, lighting, and landscaping.
Construction: Off-Road Equipment	Off highway truck = water truck.
Construction: Trips and VMT	350 truckloads asphalt/concrete/aggregate imported during paving assuming 12 inches of uncompressed depth. 700 one way trips assuming 16 CY per tandem trailer load. Worker and vendor trips added to park construction assuming 10 workers per day and 1 vendor delivery.
Construction: On-Road Fugitive Dust	Project site is in an urban area in the City of Vacaville. No unpaved public roads in the area.
Operations: Vehicle Data	Added 1,200 trips per day for the event pavilion for Saturday and Sunday. Assuming maximum occupancy of 1,200 people, 2 people per car, and two trips per car.
Operations: Road Dust	Project site is in an urban area in the City of Vacaville. No unpaved public roads in the area.

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Centennial Final Operation
Operational Year	2046
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	34.8
Location	38.37807714061569, -121.97257028103036
County	Solano-Sacramento
City	Vacaville
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	832
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	9.66	Acre	9.66	0.00	0.00	—	—	—

Other Asphalt Surfaces	11.8	Acre	11.8	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	19.9	Acre	19.9	0.00	0.00	—	—	—
City Park	183	Acre	183	0.00	2,582,347	241,525	—	—
Health Club	65.0	1000sqft	1.49	65,000	0.00	—	—	—
Day-Care Center	10.0	1000sqft	0.23	10,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.9	6.89	54.3	0.14	0.14	14.3	14.5	0.14	3.63	3.76	16,803
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.9	7.85	49.6	0.13	0.14	14.3	14.5	0.13	3.63	3.76	15,796
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.54	5.32	33.8	0.09	0.12	9.55	9.66	0.11	2.42	2.53	11,680
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.74	0.97	6.18	0.02	0.02	1.74	1.76	0.02	0.44	0.46	1,934

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.58	6.03	50.4	0.14	0.07	14.3	14.4	0.07	3.63	3.70	14,342
Area	4.24	0.03	3.26	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	13.5
Energy	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,618
Water	—	—	—	—	—	—	—	—	—	—	76.8
Waste	—	—	—	—	—	—	—	—	—	—	753
Refrig.	—	—	—	—	—	—	—	—	—	—	0.35
Total	12.9	6.89	54.3	0.14	0.14	14.3	14.5	0.14	3.63	3.76	16,803
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.11	7.01	48.9	0.13	0.07	14.3	14.4	0.07	3.63	3.70	13,348
Area	3.71	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,618
Water	—	—	—	—	—	—	—	—	—	—	76.8
Waste	—	—	—	—	—	—	—	—	—	—	753
Refrig.	—	—	—	—	—	—	—	—	—	—	0.35
Total	11.9	7.85	49.6	0.13	0.14	14.3	14.5	0.13	3.63	3.76	15,796
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.52	4.46	31.5	0.09	0.05	9.55	9.60	0.05	2.42	2.47	9,225
Area	3.97	0.01	1.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.64
Energy	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,618
Water	—	—	—	—	—	—	—	—	—	—	76.8
Waste	—	—	—	—	—	—	—	—	—	—	753
Refrig.	—	—	—	—	—	—	—	—	—	—	0.35
Total	9.54	5.32	33.8	0.09	0.12	9.55	9.66	0.11	2.42	2.53	11,680

Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.01	0.81	5.75	0.02	0.01	1.74	1.75	0.01	0.44	0.45	1,527
Area	0.73	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.10
Energy	0.01	0.15	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	268
Water	—	—	—	—	—	—	—	—	—	—	12.7
Waste	—	—	—	—	—	—	—	—	—	—	125
Refrig.	—	—	—	—	—	—	—	—	—	—	0.06
Total	1.74	0.97	6.18	0.02	0.02	1.74	1.76	0.02	0.44	0.46	1,934

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	3.27	2.33	19.6	0.05	0.03	5.65	5.68	0.03	1.43	1.46	5,646
Health Club	4.38	3.12	26.3	0.07	0.04	7.55	7.59	0.04	1.91	1.95	7,551
Day-Care Center	0.93	0.58	4.45	0.01	0.01	1.12	1.12	0.01	0.28	0.29	1,146
Total	8.58	6.03	50.4	0.14	0.07	14.3	14.4	0.07	3.63	3.70	14,342

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	3.09	2.71	18.9	0.05	0.03	5.65	5.68	0.03	1.43	1.46	5,253
Health Club	4.13	3.63	25.3	0.07	0.04	7.55	7.59	0.04	1.91	1.95	7,026
Day-Care Center	0.88	0.68	4.59	0.01	0.01	1.12	1.12	0.01	0.28	0.29	1,069
Total	8.11	7.01	48.9	0.13	0.07	14.3	14.4	0.07	3.63	3.70	13,348
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.19	0.16	1.13	< 0.005	< 0.005	0.35	0.35	< 0.005	0.09	0.09	305
Health Club	0.69	0.57	4.03	0.01	0.01	1.24	1.25	0.01	0.31	0.32	1,085
Day-Care Center	0.12	0.09	0.59	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.04	137
Total	1.01	0.81	5.75	0.02	0.01	1.74	1.75	0.01	0.44	0.45	1,527

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	208
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	379
Day-Care Center	—	—	—	—	—	—	—	—	—	—	25.9
Total	—	—	—	—	—	—	—	—	—	—	613
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	208
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	379
Day-Care Center	—	—	—	—	—	—	—	—	—	—	25.9
Total	—	—	—	—	—	—	—	—	—	—	613
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	34.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	62.7
Day-Care Center	—	—	—	—	—	—	—	—	—	—	4.28
Total	—	—	—	—	—	—	—	—	—	—	101

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Health Club	0.04	0.72	0.61	< 0.005	0.06	—	0.06	0.06	—	0.06	866
Day-Care Center	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	139
Total	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Health Club	0.04	0.72	0.61	< 0.005	0.06	—	0.06	0.06	—	0.06	866
Day-Care Center	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	139
Total	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06	1,005
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Health Club	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	143
Day-Care Center	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.0
Total	0.01	0.15	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	166

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.44	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.27	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.54	0.03	3.26	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	13.5
Total	4.24	0.03	3.26	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	13.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.44	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.27	—	—	—	—	—	—	—	—	—	—
Total	3.71	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.63	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.10
Total	0.73	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.10

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	34.1
Health Club	—	—	—	—	—	—	—	—	—	—	38.4
Day-Care Center	—	—	—	—	—	—	—	—	—	—	4.28
Total	—	—	—	—	—	—	—	—	—	—	76.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	34.1
Health Club	—	—	—	—	—	—	—	—	—	—	38.4
Day-Care Center	—	—	—	—	—	—	—	—	—	—	4.28
Total	—	—	—	—	—	—	—	—	—	—	76.8
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	5.65
Health Club	—	—	—	—	—	—	—	—	—	—	6.36
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.71

Total	—	—	—	—	—	—	—	—	—	—	12.7

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	29.7
Health Club	—	—	—	—	—	—	—	—	—	—	699
Day-Care Center	—	—	—	—	—	—	—	—	—	—	24.5
Total	—	—	—	—	—	—	—	—	—	—	753
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	29.7
Health Club	—	—	—	—	—	—	—	—	—	—	699

Day-Care Center	—	—	—	—	—	—	—	—	—	—	24.5
Total	—	—	—	—	—	—	—	—	—	—	753
Annual	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	4.91
Health Club	—	—	—	—	—	—	—	—	—	—	116
Day-Care Center	—	—	—	—	—	—	—	—	—	—	4.06
Total	—	—	—	—	—	—	—	—	—	—	125

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	0.31
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	—	—	0.35
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

City Park	—	—	—	—	—	—	—	—	—	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	0.31
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	—	—	0.35
Annual	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	0.05
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.01
Total	—	—	—	—	—	—	—	—	—	—	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type											
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	143	1,558	1,600	201,908	714	7,800	8,011	1,010,610
Health Club	2,140	1,357	1,737	719,376	10,714	6,790	8,696	3,600,697
Day-Care Center	476	62.2	58.4	130,441	1,582	311	292	443,950

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	128,025	42,675	108,098

5.10.3. Landscape Equipment

Season	Unit	Value

Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	368,612	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00
Health Club	671,447	204	0.0330	0.0040	2,694,810
Day-Care Center	45,832	204	0.0330	0.0040	432,082

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
City Park	0.00	37,511,735
Health Club	3,844,304	0.00
Day-Care Center	428,896	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—
City Park	15.7	—
Health Club	370	—
Day-Care Center	13.0	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Day-Care Center	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Day-Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Day-Care Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00

Day-Care Center	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	8.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	7.75	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	3	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.2
AQ-PM	11.5
AQ-DPM	56.2
Drinking Water	17.5
Lead Risk Housing	41.6
Pesticides	28.5
Toxic Releases	44.1
Traffic	63.2
Effect Indicators	—
CleanUp Sites	22.6
Groundwater	30.9
Haz Waste Facilities/Generators	63.1
Impaired Water Bodies	43.8
Solid Waste	52.9
Sensitive Population	—
Asthma	89.2
Cardio-vascular	70.6
Low Birth Weights	34.2
Socioeconomic Factor Indicators	—

Education	43.8
Housing	6.89
Linguistic	35.3
Poverty	49.3
Unemployment	80.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.52085205
Employed	44.86077249
Median HI	57.82112152
Education	—
Bachelor's or higher	44.59129988
High school enrollment	100
Preschool enrollment	28.17913512
Transportation	—
Auto Access	75.69613756
Active commuting	46.82407289
Social	—
2-parent households	4.683690491
Voting	55.85782112
Neighborhood	—
Alcohol availability	80.36699602
Park access	81.35506224
Retail density	72.6806108

Supermarket access	37.5465161
Tree canopy	77.12049275
Housing	—
Homeownership	47.45284229
Housing habitability	52.11086873
Low-inc homeowner severe housing cost burden	87.9892211
Low-inc renter severe housing cost burden	36.31464134
Uncrowded housing	23.08481971
Health Outcomes	—
Insured adults	39.56114462
Arthritis	41.4
Asthma ER Admissions	17.2
High Blood Pressure	64.8
Cancer (excluding skin)	55.0
Asthma	25.7
Coronary Heart Disease	63.8
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	65.9
Life Expectancy at Birth	6.4
Cognitively Disabled	72.6
Physically Disabled	86.7
Heart Attack ER Admissions	31.4
Mental Health Not Good	33.4
Chronic Kidney Disease	64.9
Obesity	27.3
Pedestrian Injuries	63.0
Physical Health Not Good	43.5

Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	14.4
Current Smoker	25.4
No Leisure Time for Physical Activity	52.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	4.0
Elderly	89.5
English Speaking	68.9
Foreign-born	18.4
Outdoor Workers	5.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	57.7
Traffic Density	42.3
Traffic Access	23.0
Other Indices	—
Hardship	72.2
Other Decision Support	—
2016 Voting	49.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0
Healthy Places Index Score for Project Location (b)	45.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses and areas estimated from the site plan.
Operations: Vehicle Data	1,200 trips added to City Park for event pavilion on Saturday and Sunday. Assume maximum occupancy of 1,200 people, 2 people per car, and 2 trips per car per day.
Operations: Road Dust	Project site is in an urban area in the City of Vacaville. No unpaved public roads in the area.

Appendix D

Biological Resources Assessment

Centennial Park Master Plan Project

Biological Resources Assessment

June 2024 | 04776.00004.001

Prepared for:

City of Vacaville – Community Development Department
650 Merchant Street
Vacaville, CA 95688

Prepared by:

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ACRONYMS AND ABBREVIATIONS

BRA	Biological Resources Assessment
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSA	California Special Animals
CWA	Clean Water Act
DBH	Diameter at Breast Height
EPA	U.S. Environmental Protection Agency
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
MSL	Mean Sea Level
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
NWPR	Navigable Waters Protection Rule
OHWM	Ordinary High Water Mark
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) prepared a Biological Resources Assessment (BRA) for the Centennial Park Master Plan Project (Project) located in the City of Vacaville in Solano County, California. The site is situated in an unsectioned portion of the Los Putos land grant and is depicted on the U.S. Geological Survey (USGS) *Allendale* and *Elmira*, CA 7.5-minute quadrangle maps. The approximate center of the Project is at latitude 38.3790795 and longitude -121.9702101, NAD 83.

The purpose of this BRA is to assess the general biological resources on the site, to assess the suitability of the site to support special-status species and sensitive natural communities or habitats (including wetlands), to assess any potential impacts to special-status species and/or sensitive natural communities that could occur if the site were developed, and to provide recommended measures to reduce or avoid any such impacts.

The 276-acre property (Study Area) is located in Centennial Park in an urban area of the City of Vacaville and is currently used as a recreational area with undeveloped areas that consist of urban, annual grassland, ruderal, ditch, perennial marsh, seasonal marsh, valley foothill riparian, vernal pool system grassland, intermittent drainage, and perennial drainage. Surrounding land uses include undeveloped land to the south, the Putah South Canal and Nut Tree Airport to the east, residences to the west, and commercial buildings to the north. Generally, the surrounding area is developed with very little connectivity to adjacent natural vegetation communities.

Known or potential biological constraints in the Study Area include:

- Potential habitat for special-status plant species that include brittlescale, vernal pool smallscale, papoose tarplant, hispid bird's-beak, recurved larkspur, dwarf downingia, San Joaquin spearscale, adobe-lily, Boggs Lake hedge-hyssop, Contra Costa goldfields, legenere, little mousetail, Baker's navarretia, bearded popcornflower, California alkali grass, two-forked clover, and saline clover;

- Potential habitat for special-status wildlife species that include Crotch's bumble bee, vernal pool fairy shrimp, vernal pool tadpole shrimp, western spadefoot, northwestern pond turtle, tricolored blackbird, grasshopper sparrow, burrowing owl, Swainson's hawk, northern harrier, white-tailed kite, and pallid bat;

- Potential habitat for nesting migratory birds and raptors;

- Public trees protected by the City of Vacaville; and

- Potentially jurisdictional waters of the U.S., State, and features subject to regulation by CDFW.

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1.0 INTRODUCTION

This report summarizes the findings of a Biological Resources Assessment (BRA) completed by HELIX Environmental Planning, Inc. (HELIX) for the 276-acre Centennial Park Master Plan Project (Project) located in the City of Vacaville, Solano County, California. This document addresses the on-site physical features, plant communities present, and common plant and wildlife species occurring or potentially occurring in the Study Area. In addition, the suitability of habitats to support special-status species and sensitive habitats (including wetlands) are analyzed along with any potential impacts to such resources, and mitigation measures that may be required prior to Project activities occurring on the site are identified.

2.0 DESCRIPTION OF THE PROPOSED PROJECT

2.1 PROJECT LOCATION

The approximately 276-acre Project site (Study Area) is in the City of Vacaville, in Solano County, California (Appendix A, Figure 1). The Study Area is situated in unsectioned portions of the Los Putos land grant and is depicted on the U.S. Geological Survey (USGS) *Allendale and Elmira*, *CA* 7.5-minute quadrangle maps. The approximate center of the Study Area is at latitude, 38.3790795 and longitude -121.9702101, NAD 83.

2.2 EXISTING CONDITIONS

The Study Area consists primarily of an existing public park and undeveloped land that is dominated by annual grassland and wetland complexes with four drainages that convey water from the west to the east and ultimately flow to the Sacramento River. Public access is available in the Study Area, and the public uses abundant walking pathways that occur throughout the Study Area. The walking pathways occur along restoration areas that support riparian habitat and wetland complexes. In addition to walking trails, the southern portion of the Study Area supports parking lots, fields for baseball, soccer, tennis, and a dog park. Undeveloped portions of the Study Area are regularly maintained and disked as evidenced in aerial imagery (Google Earth 2024) and by direct observation of disturbed soil during the site visits in March 2024. Disking is likely a result of creating fire breaks to protect surrounding residences and businesses from potential wildfire risk. Surrounding land uses include undeveloped land to the south, the Putah South Canal and Nut Tree Airport to the east, residences to the west, and commercial buildings to the north. Generally, the surrounding area is developed with very little connectivity to adjacent natural vegetation communities. All drainages that drain through the Study Area emanate from culverts that carry drainages that have been placed underground beneath residential developments to the west of the Study Area. These drainages were altered between 1984 and 1993 (NETR 2024).

Historically, the Study Area supported a homestead which likely grazed livestock, with drainages and wetland complexes. The southern portion of the Study Area historically supported a landfill, sewage waste disposal site, and evaporation ponds. This southern location currently supports recreation facilities and a large perennial marsh wetland area where previously it was used for waste disposal. A site and vicinity map of the Study Area is included in Appendix A as Figure 1, *Site and Vicinity Map*; a

topographic map of the Study Area is included as Figure 2, *USGS Topographic Map*; and an aerial image of the Study Area is included as Figure 3, *Aerial Map*.

2.3 PROJECT DESCRIPTION

The proposed project includes the expansion of the existing Centennial Park to encompass approximately 276 acres. The additional amenities to be developed will consist of a community recreation center and outdoor seating area, water play area, dog park, skate park, remote-controlled car track, roller hockey court, renovated ballfield complex, basketball courts, tennis courts, sand volleyball courts, event pavilion, pollinator garden, disc golf course, bike park, and landscaping. The Centennial Park Master Plan project is anticipated to be developed over time in phases as funding becomes available. The project would also include the expansion of parking from approximately 380 existing parking spaces to over 1,000 surfaced parking spaces and would extend the Allison Parkway access point in the northern portion of the project site.

3.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. Applicable CEQA significance criteria are also addressed in this section.

3.1 FEDERAL REGULATIONS

3.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3) (19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

In the context of the proposed Project, FESA consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) would be initiated if Project activities resulted in the potential for take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

3.1.2 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA; 16 United States Code [USC], Sec. 703, Supp. I, 1989) regulates and prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 CFR §10.13. The MBTA protects whole birds, parts of birds, and bird eggs and nests and prohibits the possession of all nests of protected bird species whether they are active or inactive. An active nest is defined as having eggs or young, as described by the Department of the Interior (April 16, 2003, Migratory Bird Permit Memorandum). Nest starts (nests that are under construction and do not yet contain eggs) are not protected from destruction. This international treaty for the conservation and management of bird species that migrate through more than one country is enforced in the United States by the USFWS. Additionally, as discussed below, §3513 of the California Fish and Game Code states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. This provides California Department of Fish and Wildlife (CDFW) with enforcement authority for Project-related impacts that would result in the "take" of bird species protected under the MBTA. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50 CFR 20. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors).

3.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to "take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof." Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

3.2 STATE JURISDICTION

3.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050 to 2097) is similar to the FESA. The California Fish and Wildlife Commission is responsible for maintaining lists of threatened and endangered species under CESA. CESA prohibits the take of listed and candidate (petitioned to be listed) species. "Take" under California law means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill (California Fish and Game Code, Section 86). The California Department of Fish and Wildlife (CDFW) can authorize take of a state-listed species under Section 2081 of the California Fish and Game Code if the take is incidental to an otherwise lawful activity, the impacts are minimized and fully mitigated, funding is ensured to implement and monitor mitigation measures, and CDFW determines that issuance would not jeopardize the continued existence of the species. A CESA permit must be obtained if a project will result in the "take" of listed species, either during construction or over the life of the project. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

3.2.2 California Code of Regulations Title 14 and California Fish and Game Code

The official listing of endangered and threatened animals and plants is contained in the California Code of Regulations Title 14 §670.5. A state candidate species is one that the California Fish and Game Code has formally noticed as being under review by CDFW to include in the state list pursuant to Sections 2074.2 and 2075.5 of the California Fish and Game Code.

Legal protection is also provided for wildlife species in California that are identified as "fully protected animals." These species are protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species at any time. CDFW has informed non-federal agencies and private parties that they must avoid take of any fully protected species in carrying out projects. However, Senate Bill 618 (2011) allows the CDFW to issue permits authorizing the incidental take of fully protected species under the CESA, so long as any such take authorization is issued in conjunction with the approval of a Natural Community Conservation Plan that covers the fully protected species (California Fish and Game Code Section 2835).

3.2.3 California Environmental Quality Act

Under the California Environmental Quality Act of 1970 (Public Resources Code Section 21000 et seq.), lead agencies analyze whether projects would have a substantial adverse effect on a candidate, sensitive, or special-status species (Public Resources Code Section 21001(c)). These "special-status" species generally include those listed under FESA and CESA, and species that are not currently protected by statute or regulation, but would be considered rare, threatened, or endangered under the criteria included CEQA Guidelines Section 15380. Therefore, species that are considered rare are addressed under CEQA regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity; plants ranked as 1A, 1B, 2A, 2B, and 3 are generally considered special-status species under CEQA.[1]

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (i.e., candidate species) would occur.

3.2.4 California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code Sections 1900-1913) requires all state agencies to use their authority to carry out programs to conserve endangered and otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use (other than

[1] The California Rare Plant Rank system can be found online at < http://www.cnps.org/cnps/rareplants/ranking.php>

changing from one agricultural use to another), which allows CDFW to salvage listed plants that would otherwise be destroyed.

3.2.5 Nesting Birds

California Fish and Game Code Subsections 3503 and 3800 prohibit the possession, take, or needless destruction of birds, their nests, and eggs, and the salvage of dead nongame birds. California Fish and Game Code Subsection 3503.5 protects all birds in the orders of Falconiformes and Strigiformes (birds of prey). Fish and Game Code Subsection 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act. The Attorney General of California has released an opinion that the Fish and Game Code prohibits incidental take.

3.2.6 California Food and Agriculture Code Section 403

This section directs the California Department of Food and Agriculture (CDFA) to prevent the introduction and spread of injurious pests including noxious weeds.

CDFA Code Section 7271 designates the CDFA as the lead department in noxious weed management responsible for implementing state laws concerning noxious weeds. Representing a statewide program, noxious weed management laws and regulations are enforced locally in cooperation with the County Agricultural Commissioner.

Under state law, noxious weeds include any species of plant that is, or is liable to be, troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate, which the director, by regulation, designates to be a noxious weed (CDFA Code Section 5004).

3.3 JURISDICTIONAL WATERS

3.3.1 Federal Requirements

On May 25, 2023, the United States Supreme Court issued a decision in the case of Sackett v. Environmental Protection Agency (Supreme Court of the United States, 2023), which will ultimately influence how federal waters are defined. The May 25, 2023, Supreme Court decision in Sackett v. Environmental Protection Agency determined that “the Clean Water Act (CWA) extends to only those ‘wetlands with a continuous surface connection to bodies that are “waters of the United States” in their own right,’ so that they are ‘indistinguishable’ from those waters.” The U.S. Environmental Protection Agency (USEPA) and the U.S. Army Corps of Engineers (USACE) after review issued a final rule to replace the 2023 rule that amends the "Revised Definition of “Waters of the U.S.” to conform key aspects of the regulatory text to the U.S. Supreme Court's May 25, 2023 decision in the case of *Sackett v. Environmental Protection Agency*.

Unless considered an exempt activity under Section 404(f) of the Federal Clean Water Act, any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other

federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). Activities exempted under Section 404(f) are not exempted within navigable waters under Section 10.

The Clean Water Act (33 USC 1251-1376) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. obtain state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found in 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there were no practicable alternative that would have less adverse impacts.

3.3.2 State Requirements

3.3.2.1 Waters of the State

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal CWA. Although the CWA is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE's permits for fill and dredge discharges within Waters of the United States, and also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On May 28, 2020, the SWRCB implemented the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California (SWRCB 2019). The Procedures consist of four major elements:

I. A wetland definition;
II. A framework for determining if a feature that meets the wetland definition is a water of the state;
III. Wetland delineation procedures; and
IV. Procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

Under the Procedures and the State Water Code (Water Code §13050(e)), "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." "Waters of the State" includes all "Waters of the U.S."

More specifically, a wetland is defined as: "*An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation*." The wetland definition encompasses the full range of wetland types commonly recognized in California, including some features not protected under federal law, and reflects current scientific understanding of the formation and functioning of wetlands (SWRCB 2019).

Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

3.3.3 California Fish and Game Code Section 1602 – Lake and Streambed Alteration Program

The CDFW is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of streambeds…except when the department has been notified pursuant to Section 1601." Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over four inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends submitting an application for a Streambed Alteration Agreement (SAA) for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

3.4 CEQA SIGNIFICANCE

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist included in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

1) 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 CDFW or USFWS;

2) 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 CDFW or USFWS;

3) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

4) 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;

5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

6) Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

An evaluation as to whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish or result in the loss of an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

3.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS Rare Plant Ranking System:

- Rank 1A: Plants presumed Extinct in California and either rare or extinct elsewhere
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2A: Plants presumed extirpated in California but common elsewhere
- Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere
- Rank 3: Plants about which we need more information – A Review List

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. The CDFW, in consultation with the CNPS assigns a California Rare Plant Rank (CRPR) to native species according to rarity; plants with a CRPR of 1A, 1B, 2A, 2B, or 3 are generally considered special-status species under CEQA. Furthermore, the CNPS CRPR include levels of threat for each species. These threat ranks include the following:

0.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);

0.2 - Moderately threatened in California (20 to 80% occurrences threatened/moderate degree and immediacy of threat); and

0.3 - Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Threat ranks do not designate a change of environmental protections, so that each species (i.e., CRPR 1B.1, CRPR 1B.2, CRPR 1B.3, etc.), be fully considered during preparation of environmental documents under CEQA.

3.4.2 California Department of Fish and Wildlife Species of Concern

Additional fish, amphibian, reptile, bird, and mammal species may receive consideration by CDFW and lead agencies during the CEQA process, in addition to species that are formally listed under FESA and CESA or listed as fully protected. These species are included on the Special Animals List, which is maintained by CDFW. This list tracks species in California whose numbers, reproductive success, or habitat may be in decline. In addition to "Species of Special Concern" (SSC), the Special Animals List includes species that are tracked in the California Natural Diversity Database (CNDDB) but warrant no legal protection. These species are identified as "California Special Animals" (CSA).

3.5 LOCAL JURISDICTION

3.5.1 Solano County Water Agency

3.5.1.1 Solano Multispecies Habitat Conservation Plan

The Solano Multispecies Habitat Conservation Plan (Solano HCP) is currently in the draft stages and is not a final document or plan as of the date of this report. If the Solano HCP becomes final prior to Project initiation, the Project proponent may apply for coverage under the Solano HCP.

The proposed Solano HCP establishes a framework for complying with State and Federal endangered species regulations while accommodating future urban growth, development of infrastructure, and ongoing operations and maintenance activities associated with flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the Plan Participants within Solano County (Solano County Water Agency 2012).

3.5.2 City of Vacaville

3.5.2.1 Vacaville General Plan

In addition to federal and State regulations described above, the Vacaville General Plan 2035 (General Plan) was adopted on August 11, 2015, by the City Council Resolution 2015-0714, which includes goals, objectives, and policies regarding biological resources within the City limits (City Vacaville 2015). Sections of the General Plan regarding biological resources can be found under the Natural Environment section and applicable sections to the Project are included below:

Goal COS-1: Protect and enhance habitat for sensitive species and natural communities.

- **COS-P1.1:** Support the Solano County Water Agency and federal and State agencies' efforts to prepare and implement the Solano HCP.

- **COS-P1.2**: Manage natural open space lands, where feasible, in a manner consistent with wildlife protection.

- **COS-P1.3:** Protect the existing wildlife movement corridors within the designated Vacaville-Fairfield Greenbelt area and create new wildlife corridors, including creek corridors and utility easements, where feasible, to enable free movement of animals, to minimize wildlife-urban conflicts, and to establish open space linkages.

- **COS-P1.4:** Continue to protect mature trees and existing native non-agricultural trees.

- **COS-P1.5:** Require new development proposals to provide baseline assessments prepared by qualified biologists. The assessment shall contain sufficient detail to characterize the resources on, and adjacent to, the development site. The assessment shall also identify the presence of important and sensitive resources, such as wetlands, riparian habitats, and rare, threatened, or endangered species affected by the development.

- **COS-P1.6:** Require that new development minimize the disturbance of natural habitats and vegetation. Require revegetation of disturbed natural habitat areas with native or non-invasive naturalized species.

- **COS-P1.7:** Encourage new development to incorporate native vegetation into landscape plans.

- **COS-P1.8:** Prohibit the use of invasive, non-native species, as identified by the State or County Department of Agriculture or other authoritative sources, in landscaping on public property or in common areas in private developments.

- **COS-P1.9:** Require that new development include provisions to protect and preserve wetland habitats that meet one of the following conditions:

    - The wetlands contribute to the habitat quality and value of reserve/preserve lands established or expected to be established in perpetuity for conservation purposes.

    - The wetlands are contiguous to riparian or stream corridors, or other permanently protected lands.

    - The wetlands are located within or contiguous to other high value natural areas.

- **COS-P1.10:** Where avoidance of wetlands is not practicable or does not contribute to long-term conservation of the resources, require new development to provide for off-site mitigation that results in no net loss of wetland acreage and functional value within the watersheds draining to the Delta or Suisun Marsh.

- **COS-P1.11:** Require that, as appropriate, new policy plans or specific plans contain a resource management component and associated funding mechanisms that includes policies to protect preserved natural communities.

- **COS-P1.12:** Until the Solano Habitat Conservation Plan (HCP) is adopted, comply with all of the Avoidance, Minimization, and Mitigation Measures listed in the Draft Solano HCP (see Appendix A for a list of the Avoidance and Minimization Measures that are applicable to Vacaville). In addition, require that development projects provide copies of required permits, or verifiable statements that permits are not required, from the California Department of Fish and Wildlife (2081 Individual Take Permit) and US Fish and Wildlife Service (Section 7 Take Authorization) prior to receiving grading permits or other approvals that would permit land disturbing activities and conversion of habitats or impacts to protected species. In cases where environmental review indicates that such permits may not be required, the Community Development Director may establish time limits of not less than 45 days from the submission of an adequate request for concurrence response from an agency. If the agency has not responded or requested a time extension of no more than 90 days to complete their assessment, within the established time frame, applicable grading permits or other authorizations may be provided, subject to other City requirements and review. However, the City's issuance of grading permits or other authorizations does not absolve the applicant's obligations to comply with all other State and federal laws and regulations.

- **COS-P1.13:** Require that new development avoid the loss of special-status bat species as feasible.

- **COS-P1.14:** Require that new development that would result in the loss or conversion of woodland resources develop and implement a plan that clusters impacts in order to reduce tree removal and impacts to trees to the maximum extent feasible.

Goal COS-2: Preserve and restore Vacaville's creeks.

- **COS-P2.1:** Discourage undergrounding of creeks and encourage daylighting of existing culverted creeks.

- **COS-P2.2:** Protect existing stream channels and riparian vegetation by requiring buffering or landscaped setbacks and storm runoff interception.

- **COS-P2.3:** Require creekway and riparian area protection during construction, such as providing adequate setbacks from the creek bank and riparian areas, and creekway and riparian area restoration after construction.

- **COS-P2.4:** Implement the City's Creekways Policy in all new development approvals to balance recreation and conservation within creekway areas. Integrate creeks with trails and other recreational open space and encourage public access along creek corridors where compatible with protection of the creek's natural resources and flood control functions.

- **COS-P2.5:** Encourage restoration and expansion of riparian and floodplain habitat within channelized streams and flood channels where feasible, such as old Alamo Creek and old Ulatis Creek channels east of Leisure Town Road.

- **COS-P2.6:** Promote invasive species control programs to reduce potential for infestations to occur and incorporate control programs as part of on-going operational and maintenance activities along creek corridors.

- **COS-P2.7:** Require creek areas in new developments to be visible from the public right-of-way to ensure safety, maintenance, access, and integration into the neighborhood.

Goal COS-14: Protect the quality and supply of surface water and groundwater resources.

- **COS-P14.1:** Protect the Alamo, Encinosa, Gibson and Ulatis Creek watersheds by minimizing point and nonpoint source pollutants.

- **COS-P14.2:** Integrate City planning and programs with other watershed planning efforts, including Best Management Practices (BMPs), guidelines, and policies of both the Sacramento and San Francisco Bay Regional Water Quality Control Boards.

- **COS-P14.3:** Encourage pest-tolerant landscapes using native plants to minimize the need for pesticides.

- **COS-P14.4:** Continue educational programs and outreach to promote water quality protection and limit pollution from pesticides and nutrients from businesses, homes, and landscaped areas.

- **COS-P14.5:** Require the implementation of Best Management Practices (BMPs) to minimize erosion, sedimentation, and water quality degradation resulting from construction or from new impervious surfaces.

- **COS-P14.6:** Protect existing open spaces, natural habitat, floodplains, and wetland areas that serve as groundwater recharge areas.

- **COS-P14.7:** Protect groundwater recharge and groundwater quality when considering new development projects.

3.5.2.2 Tree Preservation (14.09.250.060)

In addition to protections for riparian habitat and other protected habitats outlined above in the General Plan 2035 (City of Vacaville 2015), the City supports the preservation and maintenance of mature trees on private and public property in order to promote the public health, safety, and general welfare. Policy RS-P-6 addresses oak woodlands and heritage tree protection, through the adoption of an ordinance to protect oak woodlands as defined in Senate Bill (SB) 1334 and heritage oak trees. The Plan defines heritage trees as the following: (a) trees with a trunk diameter of 15 inches or more measured at 54 inches above natural grade, (b) any oak tree native to California, with a diameter of 10 inches above natural grade, or (c) any tree or group of trees specifically designated by the County for protection because of its historical significance, special character, or community benefit.

Additionally, the City recognizes individual rights to develop private property that have trees located on them and the need to maintain and improve public property with trees. The City supports the need to enhance the attractiveness of City streets and neighborhoods, enhance the value of property, retain natural beauty and the environment, provide habitat for wildlife, and preserve the character of the community. The City may trim or prune trees on public property at the discretion of the Director of

Public Works; providing that such trimming and pruning shall not endanger the long-term health of the trees. The City may remove trees subject to the approval of a tree removal permit by the Director of Public Works.

4.0 METHODS

Biological studies conducted for the Study Area consisted of a special-status species evaluation that included a desktop review and database searches to identify known biological resources in the Study Area and vicinity, as well as a reconnaissance-level biological and wetland field survey.

4.1 SPECIAL-STATUS SPECIES EVALUATION

For the purposes of this report, special-status species are those that fall into one or more of the following categories, including those:

- Listed as endangered or threatened under the FESA (including candidates and species proposed for listing);
- Listed as endangered or threatened under the CESA (including candidates and species proposed for listing);
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code;
- Designated as an SSC by the CDFW;
- Considered by CDFW to be a Watch List species with potential to become an SSC;
- Defined as rare or endangered under Section 15380 of the CEQA; or
- Having a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, 2B, or 3.

In order to evaluate special-status species and/or their habitats with the potential to occur in the Study Area and/or be impacted by the proposed Project, HELIX obtained lists of regionally occurring special-status species from the following information sources:

- California Department of Fish and Wildlife (CDFW). 2024. *California Natural Diversity Database* (CNDDB); For: *Dixon, Winters, Merritt, Monticello Dam, Dozier, Mt. Vaca, Fairfield North, Elmira, and Allendale* USGS 7.5-minute series quadrangles, Sacramento, CA. Accessed [May 31, 2024];
- California Native Plant Society (CNPS). 2024. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.39) For: *Dixon, Winters, Merritt, Monticello Dam, Dozier, Mt. Vaca, Fairfield North, Elmira, and Allendale* USGS 7.5-minute series quadrangles, Sacramento, CA. Accessed [May 31, 2024]; and
- U.S. Fish and Wildlife Service (USFWS). 2024a. *Information for Planning and Consultation* (IPaC) Centennial Park Master Plan Project. Accessed [May 31, 2024].

Appendix B includes these lists of special-status plant and animal species occurring in the Project region and Appendix C includes an evaluation of the potential for these species to occur in the Study Area.

HELIX also reviewed the following sources for published information on site conditions pertinent to biological resources:

- USGS. 2024. *Allensdale* and *Elmira, California*. 7.5-minute series topographic quadrangles. United States Department of Interior; and

- USDA, NRCS. 2024. *Web Soil Survey*. Available online at: http://websoilsurvey.sc.egov.usda.gov. Accessed [December 22, 2023].

4.2 BIOLOGICAL SURVEYS

The biological and wetland reconnaissance survey was conducted on March 12 and 14, 2024, by HELIX Senior Scientist Patrick Martin. The weather during the field survey was clear and cool with an average temperature in the 50s with 20 to 30 mile per hour winds and light intermittent precipitation. The Study Area was systematically surveyed on foot to ensure total search coverage, with special attention given to portions of the Study Area with the potential to support special-status species and sensitive habitats. Binoculars were used to further extend site coverage and identify species observed. All plant and animal species observed on-site during the surveys were recorded (Appendix D), and all biological communities occurring on-site were characterized. All resources of interest were mapped with a Global Positioning System (GPS)-capable tablet equipped with a GPS receiver running ESRI Collector for ArcGIS version 10.6.1 software. Following the field survey, the potential for each species identified in the database query to occur within the Study Area was determined based on the site survey, soils, habitats present within the Study Area, and species-specific information, as shown in Appendix C. An aquatic resources delineation (ARD) was not conducted.

5.0 RESULTS

5.1 SITE LOCATION AND DESCRIPTION

The ±276-acre Study Area is located in the City of Vacaville, Solano County, California. The Study Area is situated in an unsectioned portion of the Los Putos land grant and is depicted on the U.S. Geological Survey (USGS) *Allendale* and *Elmira*, CA 7.5-minute quadrangle maps. The Study Area consists primarily of an existing park and undeveloped land that is dominated primarily by annual grassland and wetland complexes with four drainages that convey water from the west to the east and ultimately flow to the Sacramento River. Public access is available in the Study Area, and the public uses abundant walking pathways that occur throughout the Study Area. In addition to walking trails, the southern portion of the Study Area supports parking lots, fields for baseball, soccer, tennis, and a dog park. Undeveloped portions of the Study Area are regularly maintained and disked as evidenced in aerial imagery (Google Earth 2024) and by disturbed soil during the site visits in March 2024. Disking is likely a result of creating fire breaks to protect surrounding residences and businesses. Surrounding land uses include undeveloped land to the south, the Putah South Canal and Nut Tree Airport to the east, residences to the west, and commercial buildings to the north. Generally, the surrounding area is developed with very little connectivity to adjacent natural vegetation communities. All drainages that drain through the Study Area emanate from culverts that carry drainages that have been placed underground beneath

residential developments to the west of the Study Area. These drainages were altered between 1984 and 1993 (NETR 2024).

5.2 PHYSICAL FEATURES

5.2.1 Topography and Drainage

The topography of the Study Area is generally flat with slight rolling terrain with four drainages that drain from west to east across the Study Area. Elevation in the Study Area ranges between approximately 116 feet above mean sea level (MSL) to 148 feet above MSL. The Study Area is located in the Lower Sacramento watershed (HUC8 18020163). The Study Area is comprised of a network of four drainages that generally flow to the east and are tributary to Ulatis Creek. Ulatis Creek is tributary to Cache Slough and the Sacramento River. The Study Area is located just west of the Putah South Canal, however, this canal is located outside of the Study Area, and all on-site drainages pass underneath the Putah South Canal via culverts.

5.2.2 Soils

The Natural Resources Conservation Service has mapped nine soil units within the Study Area: Altamont clay, 2 to 9 percent slopes; Altamont clay, 9 to 30 percent slopes; Capay silty clay loam, 0 percent slopes, MLRA 17; Capay clay, 0 percent slopes, MLRA 17; Clear Lake clay, 0 to 2 percent slopes, MLRA 17; Corning gravelly loam, 0 to 12 percent slopes, MLRA 17; Rincon clay loam, 0 to 2 percent slopes; San Ysidro sandy loam, 2 to 5 percent slopes, and water (USDA, NRCS 2023). Water is not a soil type and is not described further.

Altamont clay, 2 to 9 percent slopes: this soil unit is comprised of clay, and clay loam over bedrock and is derived from residuum weathered from siltstone. This soil unit is typically found on terraces and footslopes. A typical soil profile is different layers of clay and clay loam from a depth of 0 to 59 inches. There is no frequency of ponding, and flooding. This soil unit is well drained and is not considered a hydric soil. The pH of this soil unit is slightly alkaline. This soil unit is considered to support prime farmland of statewide importance.

Altamont clay, 9 to 30 percent slopes: this soil unit is comprised of clay, and silty clay loam over bedrock and is derived from residuum weathered from siltstone. This soil unit is typically found on terraces and footslopes. A typical soil profile is different layers of clay and clay loam from a depth of 0 to 59 inches over bedrock. There is no frequency of ponding and flooding. The pH of this soil unit is slightly alkaline. This soil unit is well drained and is not considered a hydric soil. This soil unit is not considered to support prime farmland of statewide importance.

Capay silty clay loam, 0 percent slopes, MLRA 17: this soil unit is comprised of silty clay loam and sandy clay loam that is derived from alluvium from igneous, metamorphic and sedimentary rock. This soil unit is typically found on alluvial fans and toeslopes. A typical soil profile is several different layers of silty clay loam and sandy loam from a depth of 0 to 102 inches. This soil unit is occasionally ponded and is rarely flooded. The pH of this soil unit is moderately alkaline. This soil unit is moderately well drained and is not considered a hydric soil. This soil unit is moderately alkaline. This soil unit is considered to support prime farmland when irrigated.

Capay clay, 0 percent slopes, MLRA 17: this soil unit is comprised of clay, silty clay, silty clay loam and sandy clay loam. This soil unit is derived from flood basin silty and clayey alluvium from metamorphic and sedimentary rock over fan alluvium derived from metamorphic and sedimentary rock. This soil unit is typically found on basin floors and toe slopes. A typical soil profile is several different layers of clay, silty clay, silty clay loam, clay loam, sandy clay loam and fine sandy loam from a depth of 0 to 102 inches. This soil unit occasionally is rarely flooded and is frequently ponded. The pH of this soil unit is moderately alkaline. This soil unit is moderately well drained. Minor components of this soil unit are considered hydric soil on basin floors. This soil unit is considered to support prime farmland when irrigated.

Clear Lake clay, 0 to 2 percent slopes, MLRA 17: this soil unit is comprised of clay that is derived from basin alluvium derived from igneous, sedimentary, and metamorphic rock. This soil unit is typically found on basin floors and treads. A typical soil profile is several different layers of clay from a depth of 0 to 60 inches. There is high frequency of ponding, and this soil series is rarely flooded. This soil unit is poorly drained and its minor components are considered a hydric soil on basin floors. The pH of this soil unit is moderately alkaline. This soil unit is considered to support prime farmland when irrigated.

Corning gravelly loam, 0 to 12 percent slopes, MLRA 17: this soil unit is comprised of gravelly loam, loam, clay very and extremely gravelly clay. This soil unit is derived from old alluvium derived from sedimentary, and metamorphic rock. This soil unit is typically found on fan remnants and summits. A typical soil profile is several different layers of loam and clay with varied amounts of gravel from a depth of 0 to 60 inches. There is no frequency of ponding, and flooding. The pH of this soil unit is slightly acidic. This soil unit is very well drained and is not considered a hydric soil. This soil unit is not considered to support prime farmland of statewide importance.

Rincon clay loam, 0 to 2 percent slopes: this soil unit is comprised of clay loam that is derived from alluvium derived from sedimentary rock. This soil unit is typically found on alluvial fans and base slopes. A typical soil profile is several different layers of clay loam from a depth of 0 to 60 inches. There is no frequency of ponding, and flooding. The pH of this soil unit is neutral. This soil unit is well drained and is not considered a hydric soil. This soil unit is considered to support prime farmland when irrigated.

San Ysidro sandy loam, 2 to 5 percent slopes: this soil unit is comprised of variable loam soils that are derived from alluvium derived from sedimentary rock. This soil unit is typically found on terraces and footslopes. A typical soil profile consists of sandy loam, clay loam, sandy clay loam and stratified sandy loam to clay loam and extends to a depth of 68 inches. The pH of this soil unit is neutral. This soil unit is moderately well drained and is not considered hydric. This soil unit is not considered prime farmland of statewide importance.

5.3 BIOLOGICAL COMMUNITIES

The Study Area is comprised of urban, annual grassland, ruderal, ditch, perennial marsh, seasonal marsh, valley foothill riparian, vernal pool system grassland, intermittent drainage, and perennial drainage (Appendix A, Figure 5). These habitat types are discussed below. A comprehensive list of all plant and wildlife species observed within the Study Area is provided in Appendix D. Representative site photographs are included in Appendix E.

5.3.1 Urban

A total of 55.69 acres of urban habitat occurs in the Study Area. Urban habitat typically consists of paved surfaces that include roads and road shoulders. Urban habitat may also consist of landscaped areas with ornamental vegetation or other managed areas. In the Study Area, urban habitat consists primarily of graded or graveled surfaces, recreation facilities that include baseball fields, tree windrows, soccer fields, a dog park, and other fields which generally do not provide habitat for plants and wildlife. However, urban habitats may provide habitat for nesting birds that have become habituated to urban habitats.

5.3.2 Annual Grassland

A total of 36.44 acres of annual grassland occurs in the Study Area. Annual grassland habitats are open grasslands composed primarily of annual plant species that occur in upland conditions. When annual grasslands are intermixed with wetland complexes, then it is best described as vernal pool system grasslands (see Section 5.3.5). Many of these species also occur as understory plants in valley foothill riparian and other habitats. Structure in annual grassland depends largely on weather patterns, livestock grazing or other management regimes; dramatic differences in physiognomy, both between seasons and between years, are characteristic of this habitat. Dominant species observed within annual grassland habitat in the Study Area include primarily nonnative annual grasses and forbs such as medusahead (*Elymus caput-medusae*), slender oats (*Avena barbata*), soft brome (*Bromus hordeaceus*), and yellow star-thistle (*Centaurea solstitialis*). Native vegetation such as Ithuriel's spear (*Triteleia laxa*) was also observed.

5.3.3 Ruderal

A total of 9.21 acres of ruderal and disturbed habitat occurs in the Study Area, which consists of areas that have been subject to past or ongoing human disturbance but retain a soil substrate. If vegetated, there is no recognizable plant community, and the species assemblage depends on local colonization potential. Ruderal and disturbed areas include barren areas, and weedy open areas where the natural vegetation has been removed. Ruderal and disturbed areas are not described in treatments of plant communities.

Ruderal areas are present in the southern portion of the Study Area in previously disturbed areas and upland areas along Browns Valley Parkway and Allison Drive and the perennial marsh areas. Vegetation in these areas is dominated by annual grasses and forbs such as slender oats, bromes, and filaree (*Erodium* spp.).

5.3.4 Ditch

A total of 0.02 acre of ditch occurs in the Study Area as a narrow-constructed ditch that drains a perennial marsh and an intermittent drainage in the southern portion of the Study Area. Hydrology in the ditch is provided when the perennial marsh overflows and drains the perennial marsh to the intermittent drainage. Dominant vegetation in the ditches varies but consists of vegetation described below in Section 5.3.6.

5.3.5 Vernal Pool System Grassland

Approximately 130.72 acres of vernal pool system grassland has been delineated within the Study Area, which are scattered throughout the Study Area and dominated by grassland habitat. Vernal pool system grassland consists of a complex of upland annual grassland (described in Section 5.3.2) intermixed with a complex of wetlands that include seasonal wetlands and vernal pools, which consist of shallow depressions or topographically low areas on the landscape that collect water from surrounding terrain and stay inundated for a long enough duration to form hydric soil and support a dominance of hydrophytic vegetation. In the Study Area, seasonal wetlands and vernal pools were typically dominated by hydrophytes that included common spikerush (*Eleocharis macrostachya*), Great Valley eryngo (*Eryngium castrense*), Italian rye grass (*Festuca perennis*), annual beard grass (*Polypogon monspeliensis*), and Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*). Wetlands in the vernal pool system grassland consisted of both isolated wetlands surrounded by upland annual grassland, or a network of wetlands that are tributary to adjacent drainages.

5.3.6 Perennial Marsh

Approximately 17.30 acres of perennial marsh have been delineated within the Study Area, consisting of three large wetland areas that are located in the southeastern corner of the Study Area and receive hydrologic input at least in part from the water used to irrigate the park and precipitation. Historically, these areas functioned as part of a sewage waste system. Perennial marsh is hydrologically connected to an intermittent drainage along the southern portion of the Study Area. Perennial marsh was inundated with water during the site visits in March and provides relatively deepwater habitat for obligate wetland vegetation such as California bulrush (*Schoenoplectus californicus*), common cattail (*Typha latifolia*), annual beard grass, common spikerush, Baltic rush (*Juncus balticus*), tall flatsedge (*Cyperus eragrostis*), and willow species (*Salix* spp.).

5.3.7 Seasonal Marsh

Approximately 1.78 acres of seasonal marsh have been delineated within the southern portion of the Study Area, consisting of a wetland area that is located adjacent to an unnamed perennial drainage. Seasonal marsh is hydrologically connected to a perennial drainage in the Study Area and abuts to annual grassland and valley foothill riparian habitat, which is located along the banks of the perennial drainage. The seasonal marsh was inundated with water during the site visits in March 2024. Beaver dams located along the perennial drainage floods adjacent grasslands and forms seasonal marsh habitat. Vegetation common in the seasonal marsh includes species such as Baltic rush, Italian ryegrass, annual beard grass, and tall flatsedge.

5.3.8 Valley Foothill Riparian

Approximately 14.88 acres of valley foothill riparian was mapped within the Study Area, consisting of four large riparian areas along unnamed drainages that pass from east to west across the Study Area. Valley foothill riparian is situated in low areas that abut perennial drainages and occurs along the banks of the drainages or within the influence of the drainage. In the Study Area, valley foothill riparian consisted of native hydrophytes that included white alder (*Alnus rhombifolia*), willow species such as narrowleaf willow (*Salix exigua*) and Fremont cottonwood (*Populus fremontii*), in addition to non-hydrophytic vegetation such as coast live oak (*Quercus agrifolia*) and coyote bush (*Baccharis pilularis*). Understory vegetation consisted of Italian ryegrass. Valley foothill riparian habitat connects to or is

adjacent to four drainages in the Study Area. Valley foothill riparian provides instream shade for the drainages and provides nesting habitat and cover for wildlife species such as North American beaver (*Castor canadensis*).

5.3.9 Perennial Drainage

A total of 8.83 acres of perennial drainage was identified within the Study Area, consisting of two perennial drainages, which are both unnamed. Both perennial drainages in the Study Area have a well-defined bed and bank, with steeply incised banks. Both perennial drainages support hydrophytic vegetation consistent with the perennial marsh habitat (described in Section 5.3.6) and exhibit an ordinary high water mark (OHWM). Perennial drainages are typically fed by waters from a groundwater table that supplies water year-round and are supplemented by precipitation and storm water runoff. Both drainages enter the Study Area via culverts or portions of the streambed that were placed underground. All drainages in the Study Area are within the Ulatis Creek watershed and are ultimately tributary to the Sacramento River.

After the initial onset of rains these features have persistent flows throughout and past the end of the rainy season with reduced flow prior to the onset of precipitation in the fall. Typically, these features exhibit a defined bed and bank and show signs of scouring because of rapid flow events. The bed of perennial drainages typically consists of mud bottom. The limit of the OHWM was determined to be where the transition of sediment and drift deposits at the base of an abrupt change in bank slope. The stream channel was dominated by vegetation found in perennial marsh habitat and the banks were dominated by valley foothill riparian vegetation which provided instream shade. The banks of the perennial drainages were steeply incised with exposed roots extending into the stream channel. Both perennial drainages supported large beaver dams and beaver lodges, with beaver dams estimated to be over eight feet tall. Beaver dams backed up large sections of the drainages providing habitat for several species of obligate wetland plants within the stream channel.

5.3.10 Intermittent Drainage

A total of 1.16 acres of intermittent drainage was identified within the Study Area, consisting of two intermittent drainages that cross the Study Area from west to east. Intermittent drainages are typically fed by waters from a seasonally perched groundwater table and are supplemented by precipitation and storm water runoff. After the initial onset of rains these features have persistent flows throughout and past the end of the rainy season. Typically, these features exhibit a defined bed and bank and show signs of scouring because of rapid flow events. The bed of intermittent drainages consists of mud, gravel, and cobble. Hydrophytic vegetation was present in the intermittent drainage which is fed upstream by West Point Regulating Reservoir, a ditch, and one ephemeral drainage. One intermittent drainage enters the Study Area via a culvert or portions of the streambed that was placed underground, while the southernmost intermittent drainage has not been placed underground. All drainages in the Study Area are within the Ulatis Creek watershed and are ultimately tributary to the Sacramento River.

5.4 SPECIAL-STATUS SPECIES

Special-status species are plant and wildlife species that have been afforded special recognition by federal, State, or local resource agencies or organizations. They are generally of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under CESA or FESA;
- Protected under other regulations (e.g., the PCCP, MBTA);
- Included on the CDFW Special Animals List or Watch List;
- Identified as Rare Plant Rank 1 to 3 by CNPS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on queries of the CNDDB, the USFWS, and CNPS ranked species (online versions) for the *Allendale* and *Elmira, CA* USGS quadrangles and eight surrounding quadrangles (Appendix A). Appendix B includes the common name and scientific name for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence within the Study Area. The following set of criteria has been used to determine each species' potential for occurrence within the Study Area:

Will Not Occur: Species is either sessile (i.e., plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur on the Study Area;

Not Expected: Species moves freely and might disperse through or across the Study Area, but suitable habitat for residence or breeding does not occur in the Study Area, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100% certainty;

Presumed Absent: Habitat suitable for residence and breeding occurs in the Study Area; however, focused surveys conducted for the current project were negative;

May Occur: Species was not observed on the site and breeding habitat is not present, but the species has the potential to utilize the site for dispersal;

High: Habitat suitable for residence and breeding occurs in the Study Area and the species has been recorded recently in or near the Study Area, but was not observed during surveys for the current project; and

Present: The species was observed during biological surveys for the current project and is assumed to occupy the Study Area or utilize the Study Area during some portion of its life cycle.

A total of 43 special-status plant species and 32 special-status wildlife species were identified during the database queries and desktop review as occurring in the region surrounding the Study Area. These species are evaluated in Appendix C. Only those species that are known to be present, have a high potential to occur, or may occur are discussed further in the following sections.

5.4.1 Listed and Special-Status Plants

Based on field observations, literature review, and published information, 17 special-status plant species have the potential to occur in the Study Area and immediate vicinity. Special-status plant species that were defined in the regulatory framework Sections 3.1.1, 3.2.4, and 3.4.1 include species listed under FESA and CESA and species that are not currently protected by statute or regulation, but would be considered rare, threatened, or endangered. The CNPS ranks species according to rarity; plants ranked as 1A, 1B, 2A, 2B, and 3. Special-status plant species with the potential to occur in the Study Area

include: bitterscale (*Atriplex depressa*), vernal pool smallscale (*Atriplex persistens*), papoose tarplant (*Centromadia parryi* ssp. *parryi*), hispid bird's-beak (*Chloropyron molle* ssp. *hispidum*), recurved larkspur (*Delphinium recurvatum*), dwarf downingia (*Downingia pusilla*), San Joaquin spearscale (*Extriplex joaquinana*), adobe-lily (*Fritillaria pluriflora*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Contra Costa goldfields (*Lasthenia conjugens*), legenere (*Legenere limosa*), little mousetail (*Myosurus minimus* ssp*. apus*), Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*), beared popcornflower (*Plagiobothrys hystriculus*), California alkali grass (*Puccinellia simplex*) two-forked clover (*Trifolium amoenum*), and saline clover (*Trifolium hydrophilum*). These species are discussed in more detail below.

Other special-status plants identified in the database query occur on alkaline flats or playas, saline wetlands, in vernal lakes or lake margins, volcanic soil, serpentinite soil, and in other native or naturalized habitat types that do not occur in the Study Area. The Study Area is comprised of mostly clay soil that varies from moderately alkaline to acidic soils dominated by acidic clay soil.

5.4.1.1 Bitterscale (CRPR 1B.2)

Bitterscale is an annual herb in the Chenopodiaceae family that is native and endemic to California. This species blooms from April to October and occurs at elevations up to 320 meters above MSL on alkaline, clay soils in chenopod scrub, meadows, seeps, playas, vernal pools, and valley and foothill grasslands (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, however this site visit was outside of the blooming period when this species would have been most identifiable. . Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. This species is known to occur in the Jepson Prairie south of the Study Area however, there are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024). There is potential for direct and indirect effects to bitterscale from the proposed Project if this species were to occur in the Study Area.

5.4.1.2 Vernal Pool Smallscale (CRPR 1B.2)

Vernal pool smallscale is an annual herb in the Chenopodiaceae family that is native to California. This species blooms from June to October and occurs at elevations up to 115 meters above MSL in alkaline vernal pools (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, however this site visit was outside of the blooming period when this species would have been most identifiable. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. This species is known to occur in the Jepson Prairie south of the Study Area however, there are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024). There is potential for direct and indirect effects to vernal pool smallscale from the proposed Project if this species were to occur in the Study Area.

5.4.1.3 Papoose Tarplant (CRPR 1B.2)

Papoose tarplant is an annual herb found in the Asteraceae family that is native and endemic to California. This species blooms from May to November and grows often in alkaline microsites. This

species occurs at elevations from sea level to 420 meters above MSL in chaparral, coastal prairie, meadows, seeps, coastal salt marshes, and vernally mesic valley and foothill grassland (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, however this site visit was outside of the blooming period when this species would have been most identifiable. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. Additionally, alkaline soils, which include Altamont clay series, Capay clay and Capay silty clay loam series and Clear Lake clay series are all rated slightly to moderately alkaline (NRCS 2023). There is only one CNDDB reported occurrence for this species within a 5-mile radius located 3.75 miles south of the Study Area (CDFW 2024). The record documents a mitigation bank with approximately 200 plants observed in 2013 (CDFW 2024). There is potential for direct and indirect effects to papoose tarplant from the proposed Project if this species were to occur in the Study Area.

5.4.1.4 Hispid Bird's-beak (CRPR 1B.1)

Hispid bird's-beak is an annual hemiparasitic herb in the Orobranchaceae family that is native and endemic to California. This species blooms from June to September and occurs at elevations 1 to 155 meters above MSL in alkaline meadows, seeps, playas, and valley and foothill grasslands (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, however this site visit was outside of the blooming period when this species would have been most identifiable. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. Additionally, alkaline soils, which include Altamont clay series, Capay clay and Capay silty clay loam series and Clear Lake clay series are all rated slightly to moderately alkaline (NRCS 2023). There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024), however this species is known to occur in Solano County, specifically near Jepson Prairie (CNPS 2024). There is potential for direct and indirect effects to hispid bird's-beak from the proposed Project if this species were to occur in the Study Area.

5.4.1.5 Recurved Larkspur (CRPR 1B.2)

Recurved larkspur is a perennial herb in the Ranunculaceae family that is native and endemic to California. This species blooms from March to June and occurs at elevations up to 79 meters above MSL in alkaline microsites in chenopod scrub, cismontane woodland, and valley and foothill grassland (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, which occurred when this species would have been identifiable. However, protocol botanical surveys were not conducted to rule out this species from occurring in the Study Area. Suitable habitat is present for this species in upland habitats in annual grassland or valley foothill riparian woodland fringes. The nearest CNDDB reported occurrence is located on the southwestern edge of the Study Area. The record is dated from 1940 and documents this species in a nonspecific location in clay soil along the roadside of Browns Valley Road (CDFW 2024). There is potential for direct and indirect effects to recurved larkspur from the proposed Project if this species were to occur in the Study Area.

5.4.1.6 Dwarf Downingia (CRPR 2B.2)

Dwarf downingia is an annual herb in the Campanulaceae family that is native to California but can also be found elsewhere in North America. This species blooms from March to May and occurs at elevations up to 445 meters above MSL in vernal pools and mesic microsites in valley and foothill grassland (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, which occurred when this species would have been identifiable. However, protocol botanical surveys were not conducted to rule out this species from occurring in the Study Area. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. The nearest CNDDB reported occurrence is located 1.3 miles northeast of the Study Area and documents an estimated 250,000 plants in 1998 (CDFW 2024). There is potential for direct and indirect effects to dwarf downingia from the proposed Project if this species were to occur in the Study Area.

5.4.1.7 San Joaquin Spearscale (CRPR 1B.2)

San Joaquin spearscale is an annual herb in the Chenopodiaceae family that is native to California but can also be found elsewhere in North America. This species blooms from April to October and occurs at elevations up to 445 meters above MSL in vernal pools and mesic microsites in valley and foothill grassland (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, however this site visit was outside of the blooming period when this species would have been most identifiable. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. The nearest CNDDB reported occurrence is located 1.3 miles northeast of the Study Area and documents an estimated 250,000 plants in 1998 (CDFW 2024). There is potential for direct and indirect effects to San Joaquin spearscale from the proposed Project if this species were to occur in the Study Area.

5.4.1.8 Adobe-lily (CRPR 1B.2)

Adobe-lily is a bulbiferous herb in the Liliaceae family that is native and endemic to California. This species blooms from February to April and occurs at elevations 45 to 945 meters above MSL in adobe clay microsites in chaparral, cismontane woodland, and valley and foothill grassland (CDFW 2024; CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, which occurred when this species would have been identifiable. However, protocol botanical surveys were not conducted to rule out this species from occurring in the Study Area. Suitable habitat is present for this species in upland habitats in annual grassland or valley foothill riparian woodland fringes. There are no recent CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024). The nearest CNDDB reported occurrence is a historic and non-specific occurrence mapped adjacent to the Study Area (CDFW 2024). The record is dated from 1913 and documents a collection of this species in a nonspecific location just east of Bennett Hill Drive (CDFW 2024). There is potential for direct and indirect effects to adobe-lily from the proposed Project if this species were to occur in the Study Area.

5.4.1.9 Boggs Lake Hedge-hyssop (CESA Endangered; CRPR 1B.2)

Boggs Lake hedge-hyssop is an annual herb in the Plantaginaceae family that is native to California but can also be found in Oregon. This species blooms from April to August and occurs at elevations up to 2,375 meters above MSL in marshes, swamps, lake margins, and large vernal pools in clay soils (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, however this site visit was conducted outside of the blooming period when this species would have been most identifiable. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2023). There is potential for direct and indirect effects to Boggs Lake hedge-hyssop from the proposed Project if this species were to occur in the Study Area.

5.4.1.10 Contra Costa Goldfields (ESA Endangered; CRPR 1B.1)

Contra Costa goldfields is an annual herb in the Asteraceae family that is native and endemic to California. This species blooms from March to June and occurs at elevations up to 470 meters above MSL in mesic habitats within cismontane woodland, alkaline playas, valley and foothill grassland and vernal pools (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, which occurred when this species would have been identifiable. However, protocol botanical surveys were not conducted to rule out this species from occurring in the Study Area. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. There are no extant CNDDB reported occurrences in the Study Area (CDFW 2024), however this species is known to occur in Solano County, specifically near Jepson Prairie (CNPS 2024). There is potential for direct and indirect effects to Contra Costa goldfields from the proposed Project if this species were to occur in the Study Area.

5.4.1.11 Legenere (CRPR 1B.1)

Legenere is an annual herb in the Campanulaceae family that is native and endemic to California. This species blooms from April to June and occurs at elevations up to 880 meters above MSL in vernal pools (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, however this site visit was conducted outside of the blooming period when this species would have been most identifiable. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. There are no extant CNDDB reported occurrences in the Study Area (CDFW 2024), however this species is known to occur in Solano County, specifically south of Interstate 80 near Jepson Prairie (CNPS 2024). There is potential for direct and indirect effects to legenere from the proposed Project if this species were to occur in the Study Area.

5.4.1.12 Little Mousetail (CRPR 3.1)

Little mousetail is an annual herb in the Campanulaceae family that is native to California, Baja California and Oregon. This species blooms from March to June and occurs at elevations from 20 to 640 meters above MSL in alkaline vernal pools in valley and foothill grassland (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, which occurred when this species would have been identifiable. However, protocol botanical surveys were not conducted to rule out this species from occurring in the Study Area. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. Additionally, alkaline soils, that include Altamont clay series, Capay clay and Capay silty clay loam series and Clear Lake clay series are all rated slightly to moderately alkaline (NRCS 2023). There are no extant CNDDB reported occurrences in the Study Area (CDFW 2024), however this species is known to occur in Solano County, specifically south of Interstate 80 near Jepson Prairie (CNPS 2024). There is potential for direct and indirect effects to little mousetail from the proposed Project if this species were to occur in the Study Area.

5.4.1.13 Baker's Navarretia (CRPR 1B.1)

Baker's navarretia is an annual herb in the Campanulaceae family that is native and endemic to California. This species blooms from April to July and occurs at elevations up to 880 meters above MSL in mesic meadows and vernal pools in cismontane woodland, lower montane coniferous forest, and valley and foothill grassland (CNPS 2024).

This species has not been documented in the Study Area during surveys conducted in March 2024, however this site visit was conducted outside of the blooming period when this species would have been most identifiable. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. There are several recent CNDDB reported occurrences for this species. The nearest record documents this species in vernal pools and swales in mitigation land located 1.8 miles north of the Study Area (CDFW 2024). There is potential for direct and indirect effects to Baker's navarretia from the proposed Project if this species were to occur in the Study Area.

5.4.1.14 Bearded Popcornflower (CRPR 1B.1)

Bearded popcornflower is an annual herb in the Boraginaceae family that is native and endemic to California. This species blooms from April to May and occurs at elevations up to 274 meters above MSL in mesic valley and foothill grassland, and along the margins of vernal pools and vernal swales (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, however this site visit was conducted outside of the blooming period when this species would have been most identifiable. Suitable habitat is present for this species in vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. There are two recent CNDDB reported occurrences for this species that document this species in vernal pools and swales near the Study Area with the most recent record from 2016 and approximately 1.7 miles north of the Study Area (CDFW 2024). There is potential for direct and indirect effects to bearded popcornflower from the proposed Project if this species were to occur in the Study Area.

5.4.1.15 California Alkali Grass (CRPR 1B.2)

California alkali grass is an annual herb in the Poaceae family that is native to California and elsewhere in North America. This species blooms from March to May and occurs at elevations 2 to 930 meters above MSL in alkaline, vernally mesic sinks, flats, and lake margins in chenopod scrub, meadows, seeps, vernal pools, and valley and foothill grasslands (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, which occurred when this species would have been identifiable. However, protocol botanical surveys were not conducted to rule out this species from occurring in the Study Area.. Suitable habitat is present for this species in marshes, vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. Additionally, alkaline soils, which include Altamont clay series, Capay clay and Capay silty clay loam series and Clear Lake clay series are all rated slightly to moderately alkaline (NRCS 2023). There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024), however this species is known to occur in Solano County, specifically near Jepson Prairie (CNPS 2024). There is potential for direct and indirect effects to California alkali grass from the proposed Project if this species were to occur in the Study Area.

5.4.1.16 Two-forked Clover (ESA Endangered; CRPR 1B.1)

Two-forked clover is an annual herb in the Fabaceae family that is native and endemic to California. This species blooms from April to June and occurs at elevations 5 to 415 meters above MSL in wetlands in coastal bluff scrub and valley and foothill grassland (CNPS 2024). This species sometimes occurs on serpentine soils but is a weak indicator for ultramafic soil. Most records for this species are historic and recent rediscoveries are uncertain (CNPS 2024).

This species was not documented in the Study Area during surveys conducted in March 2024, which occurred when this species would have been identifiable. However, protocol botanical surveys were not conducted to rule out this species from occurring in the Study Area. Suitable habitat is present for this species in marshes, vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. There are no current CNDDB reported occurrences for this species other than historic accounts that are non-specific as to where the specimen was observed, and records are over 100 years old (CDFW 2024). There is potential for direct and indirect effects to two-forked clover from the proposed Project if this species were to occur in the Study Area.

5.4.1.17 Saline Clover (CRPR 1B.2)

Saline clover is an annual herb in the Fabaceae family that is native and endemic to California. This species blooms from April to June and occurs at elevations up to 300 meters above MSL in marshes, swamps, mesic alkaline valley and foothill grassland, and vernal pools (CNPS 2024).

This species has not been documented in the Study Area during surveys conducted in March 2024, however this site visit was conducted outside of the blooming period when this species would have been most identifiable. Suitable habitat is present for this species in marshes, vernal pool system grasslands, which are a complex of upland annual grassland intermixed with vernal pools, vernal swales and seasonal wetlands. Additionally, alkaline soils, which include Altamont clay series, Capay clay and Capay silty clay loam series and Clear Lake clay series are all rated slightly to moderately alkaline (NRCS 2023). There are no current CNDDB reported occurrences for this species other than historic accounts

that are non-specific east of Nut Tree Airport (CDFW 2024). This species is known to occur in Solano County, specifically near Jepson Prairie (CNPS 2024). There is potential for direct and indirect effects to saline clover from the proposed Project if this species were to occur in the Study Area.

5.4.2 Listed and Special-Status Wildlife

Based on field observations, literature review, and published information, 14 special-status wildlife species have the potential to occur in the Study Area and immediate vicinity: Crotch's bumble bee (*Bombus crotchii*), vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardi*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), western spadefoot (*Spea hammondii*), California tiger salamander (*Ambystoma californiense*), northwestern pond turtle (*Actinemys marmorata*), tricolored blackbird (*Agelaius tricolor*), grasshopper sparrow (*Ammodramus savannarum*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), and pallid bat (*Antrozous pallidus*). In addition, other migratory birds and raptors protected under federal, State, and local laws/policies also have potential to occur within the Study Area or nest in the vicinity of the Study Area.

Although habitat for California tiger salamander (*Ambystoma californiense*) was determined to be present, the Study Area is fragmented and surrounded entirely by urban development which significantly reduces the suitability of habitat for this species (USFWS 2017). Nearby CNDDB records for this species are in the Jepson Prairie, south of Interstate 80 (CDFW 2024), which Interstate 80, busy roads, and urban development provides a complete barrier for dispersal of this species from known and unknown populations (USFWS 2017). Species that were determined to have no potential to occur in the Study Area (Appendix C) or be impacted by the Project are not discussed further in this document.

5.4.2.1 Crotch's Bumble Bee (CESA Candidate Endangered)

Crotch's bumble bee is a CESA candidate species that occurs in grassland and scrub habitats. New colonies are initiated by solitary queens, generally in the early spring, which typically occupy abandoned rodent burrows (CDFW 2019). This species is a generalist forager and has been reported to visit a wide variety of flowering plants. Food plants include *Asclepias* spp., *Antirrhinum* spp., *Clarkia* spp., *Eschscholzia* spp., *Eriogonum* spp., *Chaenactis* spp., *Lupinus* spp., *Medicago* spp., *Phacelia* spp., and *Salvia* spp. (Koch et al. 2012). The flight period for queens in California is from February to October. New queens hibernate over the winter and initiate a new colony the following spring (CDFW 2019). This species is rare throughout its range and in decline in the Central Valley and southern California (CDFW 2019).

The annual grassland and ruderal vegetation communities within the Study Area provide suitable habitat for this species. Rodent burrows within the Study Area provide suitable nesting habitat for this species, and floral resources within the Study Area provide foraging habitat. There is one CNDDB reported occurrence within a 5-mile radius of the Study Area (CDFW 2024). This record documents a collection of this species 3.1 miles southwest of the Study Area at Lagoon Valley Reservoir in 2007 (CDFW 2024). Additionally, the Study Area is within the current range of this species (CDFW 2023). There is potential for direct and indirect effects to Crotch's bumble bee if this species were to utilize the Study Area for nesting, overwintering or foraging during the implementation of this project. There is potential for direct and indirect effects to Crotch's bumble bee from the proposed Project if this species were to occur in the Study Area.

5.4.2.2 Vernal Pool Fairy Shrimp (ESA Threatened)

Vernal pool fairy shrimp are listed as a federally threatened species and are endemic to California and the Agate Desert of southern Oregon. In California, this species is known from Stillwater Plain in Shasta County through most of the length of the Central Valley to Pixley in Tulare County (additional disjunct populations exist at various locations throughout the state). This species generally occurs in vernal pools but may also be found in a variety of both natural and artificial wetlands such as alkali pools, seasonal wetlands, swales, stock ponds, and ditches (Helm and Vollmar 2002). Occupied wetlands are typically small and pond for a relatively short duration (3 to 4 weeks) (Eriksen and Belk 1999).

Vernal pool fairy shrimp was not observed in the Study Area during surveys conducted in March 2024, however protocol surveys were not completed for this species. Vernal pool habitat including large pools provide habitat for this species in vernal pool system grassland habitat in the Study Area. There are eight CNDDB reported occurrences within a 5-mile radius of the Study Area with the nearest record occurring 0.7 mile east of the Study Area (CDFW 2023). Based on suitable habitat within the Study Area and nearby known documented occurrences, vernal pool fairy shrimp has a high potential to occur in the Study Area. There is potential for direct and indirect effects to vernal pool fairy shrimp from the proposed Project if this species were to occur in the Study Area.

5.4.2.3 Vernal Pool Tadpole Shrimp (ESA Endangered)

Vernal pool tadpole shrimp are listed as federally endangered and are endemic to California and a small portion of southern Oregon. In California, this species has a patchy distribution across the Central Valley, from Shasta County south to northwestern Tulare County, with isolated occurrences in Alameda and Contra Costa counties (USFWS 2024b). This species occurs in a variety of seasonally inundated habitats, particularly low-alkalinity seasonal pools in grasslands. It is known to occur in vernal pools, wetlands, and other freshwater habitats; generally, those that are larger, deeper features where dissolved oxygen levels are higher and the features remain inundated for longer periods (CDFW 2024).

Vernal pool tadpole shrimp was not observed in the Study Area during surveys conducted in March 2024, however protocol surveys were not completed for this species. Vernal pool habitat including large pools provide habitat for this species in vernal pool system grassland habitat in the Study Area. There are eight CNDDB reported occurrences within a 5-mile radius of the Study Area with the nearest record occurring 0.6 mile south of the Study Area (CDFW 2024). The CNDDB record from 1995 documents only a single cyst and suggests this vernal pool was removed for a highway project (CDFW 2024). Based on suitable habitat within the Study Area and nearby known documented occurrences, vernal pool tadpole shrimp has a high potential to occur in the Study Area. There is potential for direct and indirect effects to vernal pool tadpole shrimp from the proposed Project if this species were to occur in the Study Area.

5.4.2.4 Valley Elderberry Longhorn Beetle (ESA Threatened)

Valley elderberry longhorn beetle is federally listed as threatened and endemic to elderberry shrubs (*Sambucus* spp.) within riparian habitat in the Sacramento and San Joaquin Valleys, and less common throughout riparian forests of the Central Valley from Redding to Fresno County (USFWS 2014) typically below 152 m amsl (USFWS 2017a).

Although elderberry (*Sambucus* spp.) shrubs that could provide habitat for valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) were not detected in the Study Area in March 2024, focused surveys for elderberry shrubs were not conducted and some riparian areas were composed of dense

vegetation that would have made detection of elderberry shrubs difficult. Suitable riparian habitat is present in the Study Area, however, the riparian habitat in the Study Area is not contiguous with other occupied riparian habitat with documented occurrences of valley elderberry longhorn beetle (CDFW 2024). There is one CNDDB reported occurrence within a 5-mile radius of the Study Area located 2 miles west of the Study Area along Alamo Creek. The record documents occupied riparian habitat along Alamo Creek in 2008 (CDFW 2024). Given that there is suitable habitat for elderberry shrubs onsite and there are documented occurrences in the vicinity, this species may occur within the Study Area.

5.4.2.5 Western Spadefoot (ESA Proposed Threatened; CDFW Species of Special Concern)

Western spadefoot occurs in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, and playas. It breeds in vernal pools, depressional wetlands, puddles, and other ephemeral water features including altered or constructed features, often after heavy rains. Breeding sites must remain inundated for at least 3–11 weeks for larvae to mature with water temperatures between 48–86 degrees Fahrenheit (USFWS 2023a). Spadefoots are primarily terrestrial and require upland habitats for feeding and for constructing burrows for long dry-season dormancy (USFWS 2023a). Spadefoot typically burrows up to 3 feet below the surface and require sandy or friable soils which facilitate digging and water absorption (USFWS 2023a). Dispersal through uplands may vary between wet and dry years but is considered to be up to 262 meters in a dry year and up to 605 meters in a wet year but is typically less (USFWS 2023a).

Western spadefoot was not observed in the Study Area during surveys conducted in March 2024, however the vernal pool system grassland habitat in the Study Area contains suitable upland and aquatic habitats for this species. Western spadefoot may utilize the vernal pools, seasonal wetlands, puddles, and other ephemeral features within the Study Area as breeding habitat if they are inundated during the breeding season (generally October to May, peaking in February and March) and remain inundated for at least 3 to 11 weeks to allow larvae development and metamorphosis. These features were all inundated at the time of the field survey. Small mammal burrows and other crevices within the Study Area provide suitable refugia habitat. Soils are varied in the Study Area, which range from clay, loam to sandy or gravelly loam which may provide friable soils for burrowing during the dry season. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024). There is potential for direct and indirect effects to western spadefoot as this species could forage, breed and overwinter within the Study Area, or in the vicinity of the Study Area, and potentially be impacted by the proposed Project during the breeding season or during dry season dormancy. There is potential for direct and indirect effects to western spadefoot from the proposed Project if this species were to occur in the Study Area.

5.4.2.6 California Tiger Salamander (ESA Threatened; CESA Threatened)

California tiger salamanders are generally restricted to vernal pools and seasonal ponds, including many constructed stock ponds, in grassland and oak savannah plant communities from sea level to about 1,500 feet in central California. This species spends the majority of its life in upland areas in the vicinity of suitable breeding ponds, where it inhabits rodent burrows. In order to provide suitable habitat for this species, suitable breeding habitat must be present in combination with suitable upland habitat. In the Coastal region, populations are scattered from Sonoma County in the northern San Francisco Bay Area to Santa Barbara County, and in the Central Valley and Sierra Nevada foothills from Yolo to Kern counties (USFWS 2017b).

Suitable habitat is present in the Study Area for this species, and habitat is mapped as suitable by the Solano Habitat Conservation Plan (City of Vacaville 2015). Wetland habitat in the Study Area that could support larval development of this species is present in vernal pools in vernal pool system grassland habitat with upland dispersal and refuge habitat present in annual grassland habitat. However, the Study Area is fragmented and isolated from known populations of this species and surrounded entirely by urban development which significantly reduces the suitability of habitat for this species (USFWS 2017b). Nearby CNDDB records for this species are in the Jepson Prairie, south of Interstate 80 and approximately 10 miles from the Study Area which is greater than the maximum known dispersal distance for this species (CDFW 2024). There is potential for direct and indirect effects to California tiger salamander as this species could forage, breed and overwinter within the Study Area and potentially be impacted by the proposed Project during the breeding season or during dry season dormancy if occupied dry season burrows were impacted by construction. Interstate 80 and urban development provides at least a partial barrier for dispersal of this species from known populations and unknown populations (USFWS 2017b). Given the distance of the Study Area from known populations of this species, there is a low likelihood for this species to occur onsite. However, the Study Area contains suitable breeding and upland refugia habitat for this species so it may occur onsite.

5.4.2.7 Northwestern Pond Turtle (ESA Proposed Threatened; CDFW Species of Special Concern)

Northwestern pond turtles, a federally proposed threatened species and a CDFW species of special concern, occur in a variety of aquatic habitats; typically, semi-permanent ponds, lakes, streams, irrigation ditches, canals, marshes, or pools in intermittent drainages. It prefers areas lined with abundant vegetation and either rocky or muddy substrates. It requires basking sites such as logs, rocks, cattail mats or exposed banks. The species is active from February to November, and breeding occurs from April to May. Females typically nest in compact and dry soils from 3 to 400 meters from water, with a preference for south facing slopes between 0 and 60 degrees with little vegetation cover, however pond turtles occurring in forested areas will select nest sites under forest canopy that is more open. Overwintering occurs in upland terrestrial habitats close to water sources in open areas (up to 500 meters from water), in which they will bury themselves under loose soil where leaf litter is present (USFWS 2023b).

Northwestern pond turtle was not observed in the Study Area during surveys conducted in March 2024. The four drainages that include intermittent and perennial drainages in addition to marsh and other wetland habitats in the Study Area provide suitable habitat for this species. Drainages in the Study Area supported several large beaver dams with large impoundments which provide excellent habitat for northwestern pond turtle. Nesting habitat is present in riparian, ruderal and annual grassland habitat, which could provide upland egg-laying habitat for this species. There are two CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024). The nearest record documents one adult and one juvenile in 2016 approximately 1.5 miles east of the Study Area along a Ulatis Creek Flood Control Channel (CDFW 2024). There is potential for direct and indirect effects to northwestern pond turtle as this species could nest and winter within the Study Area, or in the vicinity of the Study Area, and potentially be impacted by the proposed Project during the nesting season and wintering season. There is potential for direct and indirect effects to northwestern pond turtle from the proposed Project if this species were to occur in the Study Area.

5.4.2.8 Tricolored Blackbird (CESA Threatened and CDFW Species of Special Concern)

Tricolored blackbirds are common locally throughout central California. This species nests and seeks cover in emergent wetland vegetation and thorny vegetation such as Himalayan blackberry (*Rubus armeniacus*) as well as cattails and tules. The nesting area must be large enough to support a minimum colony of 50 pairs as they are a highly colonial species. This species forages on the ground in croplands, grassy fields, flooded land, and edges of ponds for insects.

Tricolored blackbird was not observed in the Study Area during surveys conducted in March 2024. Focused protocol surveys were not conducted for this species; however, the site visits were conducted during the nesting season for this species when tricolored blackbird would have been detectable either foraging or nesting in large colonies. The more common red-winged blackbird was detected foraging in the Study Area. There is only one record of this species within a 5-mile radius of the Study Area. The record documents this species 4.3 miles south of the Study Area in 2014 and 2015 (CDFW 2024). The record documents up to 1,750 individuals nesting in a detention basin with fresh emergent wetland (CDFW 2024).

Suitable foraging habitat is present for this species in ruderal areas and in annual grassland habitat within the Study Area. Suitable nesting habitat is present for this species in fresh emergent vegetation in valley foothill riparian, intermittent drainages, perennial drainages, seasonal marsh and perennial marsh habitats within the Study Area. Fresh emergent wetland vegetation present in the Study Area provides expansive emergent vegetation that would provide suitable nesting habitat for this species. Fresh emergent wetlands in the drainages are further enhanced by the presence of larger beaver dams that naturally impound the drainages. There is potential for direct and indirect effects to tricolored blackbird from the proposed Project if this species were to occur in the Study Area.

5.4.2.9 Grasshopper Sparrow (CDFW Species of Special Concern)

The grasshopper sparrow is designated as a CDFW Species of Special Concern. This species occurs in California primarily as a summer migrant and is known from Los Angeles, Mendocino, Orange, Placer, Sacramento, San Diego, San Luis Obispo, Solano, and Yuba counties (CDFW 2024). It occurs in large, dense, dry, or well-drained grasslands, especially native grasslands. This species nests on the ground at base of an overhanging clump of grass or sedge and may nest in small colonies (Audubon 2024).

This species was not observed in the Study Area during the site visits in March 2024 although annual grassland habitat in the Study Area provides nesting and foraging habitat for this species. This species has been documented within a 5-mile radius of the Study Area (CDFW 2024). Suitable foraging habitat is also present in the Study Area and potential small mammal prey species are abundant. There are two CNDDB reported occurrences within a 5-mile radius of the Study Area with the nearest record located 2.2 miles east of the Study Area (CDFW 2024). The record documents this species nesting in 2001 (CDFW 2024). There is potential for direct and indirect effects to grasshopper sparrow from the proposed Project if this species were to occur in the Study Area.

5.4.2.10 Burrowing Owl (CDFW Species of Special Concern)

Burrowing owls are often found in open, dry grasslands, agricultural and range lands, and desert habitats. They can also inhabit grass, forb, and shrub stages of pinyon and ponderosa pine habitats. Burrowing owls occur at elevations ranging from 200 feet below mean sea level to over 9,000 feet above

mean sea level. In California, the highest elevation where burrowing owls are known to occur is 5,300 feet elevation in Lassen County. In addition to natural habitats, burrowing owls can be found in urban habitats such as at the margins of airports and golf courses and in vacant urban lots. Burrowing owls forage in adjacent grasslands and other suitable habitats primarily for insects and small mammals, and less often for reptiles, amphibians, and other small birds.

Burrowing owls nest in burrows in the ground and commonly perch on fence posts or mounds near the burrow. The owls often use ground squirrel burrows, badger dens, or artificial burrows such as abandoned pipes or culverts. Although the more northern burrowing owl populations migrate seasonally, burrowing owls are year-round residents of the San Joaquin Valley. In the San Joaquin Valley, the nesting season for burrowing owl can begin as early as February 1 and continues through August 31.

No burrowing owls or sign (pellets, feathers, whitewash) were observed in the Study Area during the site visits conducted in March 2024, during the nesting season of this species. There are several CNDDB recorded occurrences within a 5-mile radius of the Study Area. The nearest record documents a burrowing owl nest 0.5 mile east of the Study Area at the Nut Tree Airport (CDFW 2024).

Suitable nesting and foraging habitat is present in the Study Area as it consists of annual grassland and ruderal areas with small mammal burrows that could provide habitat for burrowing owls. The Study Area also supports a population of California ground squirrels, which provide burrow habitat for burrowing owls. This species is known to occur in the vicinity of the Study Area during the nesting season and the wintering season and suitable habitat is present. This species could breed or overwinter in the Study Area. There is potential for direct and indirect effects to burrowing owl from the proposed Project if this species were to occur in the Study Area.

5.4.2.11 Swainson's Hawk (CESA Threatened)

This species is a long-distance migrant with nesting grounds in western North America, and wintering grounds in Mexico and South America. Swainson's hawks typically arrive in the California Central Valley between March and early April to establish breeding territories. Breeding occurs from late March to August, peaking in late May through July (Zeiner *et al.* 1990). In the Central Valley, Swainson's hawks generally nest in isolated trees, small groves of trees in agricultural land, or in large woodlands next to open grasslands or agricultural fields. This species typically nests near riparian areas; however, it has been known to nest in urban areas as well. In the Central Valley the most commonly used trees include Fremont cottonwood (*Populus fremontii*), willows (*Salix* sp.), sycamores (*Platanus* sp.), valley oaks (*Quercus lobata*), walnut (*Juglans* sp.), and occasionally gum trees (*Eucalyptus* sp.) (Woodbridge 1998). Nest locations are usually in close proximity to suitable foraging habitats, which include fallow fields, all types of grasslands, irrigated pastures, alfalfa and other hay crops, and low-growing row crops, especially post-harvest when the height of the vegetation is short and easy to observe prey (Bechard et al. 2010). Swainson's hawks leave their breeding grounds to return to their wintering grounds in late August or early September (Bloom and Van De Water 1994).

This species was not observed in the Study Area during the site visit conducted in March 2024, which is during the early nesting season for this species. There are several CNDDB reported occurrences of this species within a 5-mile radius of the Study Area (CDFW 2024) and this species is abundant in the region. The nearest CNDDB reported occurrence is located 0.3 mile east of the Study Area at the Nut Tree Airport (CDFW 2024).

The Study Area provides suitable nesting habitat for Swainson's hawk since trees are present in the Study Area and in areas adjacent to the Study Area. Suitable foraging habitat is also present in the Study Area and potential small mammal prey species are abundant. There is potential for direct and indirect effects to Swainson's hawk from the proposed Project if this species were to occur in the Study Area..

5.4.2.12 Northern Harrier (CDFW Species of Special Concern)

Northern harrier is widespread throughout North America from southern Canada to northern Mexico and is a year-round resident in California. Population sizes increase during the non-breeding season due to the arrival of over-wintering migrants. Northern harrier is also considered to be somewhat nomadic and will range widely even during nesting season. Northern harriers breed in a variety of open habitats including marshes, wet meadows, weedy shorelines, grasslands, weed fields, pastures, sagebrush flats, desert sinks, and croplands. Northern harriers nest on the ground in patches of dense, tall vegetation in undisturbed areas. Breeding occurs from March to August. Northern harriers feed on a wide variety of vertebrate prey, including rodents, songbirds, waterfowl, and lizards.

Northern harrier was not observed in the Study Area during several biological surveys in March of 2024. Small mammal prey is abundant on portions of the Study Area and in adjacent areas and could support this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024). There is potential for direct and indirect effects to northern harrier from the proposed Project if this species were to nest in the Study Area.

5.4.2.13 White-tailed Kite (CDFW Fully Protected)

White-tailed kite is a year-round resident in California in coastal areas and lowlands in the Central Valley. Population sizes increase during the non-breeding season due to the arrival of over-wintering migrants. White-tailed kites prefer open stages of habitats dominated by herbaceous species and will nest in tall trees adjacent to foraging habitat (Zeiner *et al.* 1990). White-tailed kites feed mainly on small mammals such as voles but will take other small vertebrate and invertebrate prey.

This species was observed foraging in the Study Area during the site visits in March 2024 although a nest or breeding behaviors were not detected. This species has been documented within a 5-mile radius of the Study Area (CDFW 2024). Trees located in the Study Area provide suitable nesting habitat for white-tailed kite. Suitable foraging habitat is also present in the Study Area and potential small mammal prey species are abundant. There are two CNDDB reported occurrences within a 5-mile radius of the Study Area with the nearest record located 2.2 miles east of the Study Area (CDFW 2024). The record documents this species nesting in 2001 (CDFW 2024). There is potential for direct and indirect effects to white-tailed kite if this species were to nest within or adjacent to Study Area.

5.4.2.14 Pallid Bat (CDFW Species of Special Concern)

Pallid bat occurs throughout California except for the high Sierra Nevada and the northern Coast Ranges. Habitats include grasslands, shrublands, woodlands, and forests from sea level to 6,000 feet. This species is most common in open, dry habitats with rocky areas for roosting; roosts also include cliffs, abandoned buildings, bird boxes, tree hollows, and under bridges (Bolster, ed. 1998). Young are typically born from May through June and are volant seven weeks after birth (Zeiner et al. 1990). Each liter may consist of 1–3 young.

The Study Area contains suitable roosting habitat in tree hollows and bird boxes, which are installed throughout the Study Area. Preferred rocky areas with crevices are not present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024). There is potential for direct and indirect effects to pallid bat if this species were to roost within or adjacent to Study Area.

5.4.2.15 Nesting Migratory Birds and Raptors

The Study Area and immediate vicinity provides nesting and foraging habitat for a variety of nesting migratory birds and raptors. Birds were observed within the Study Area during the field survey including black phoebe (*Sayornis nigricans*), American kestrel (*Falco sparverius*), and red-tailed hawk (*Buteo jamaicensis*). American kestrels were observed nesting in nest boxes throughout the Study Area. Several other birds and raptors have the potential to nest in the Study Area on the ground or in burrows and adjacent to the Study Area, in structures, trees, shrubs, and on the ground.

Project activities such as clearing, grading, and other ground disturbing activities during the avian nesting season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance. Needless destruction of nests, eggs, and chicks would be a violation of the Fish and Game Code and a significant impact.

5.4.2.16 Invasive Species

A total of 16 non-native species included on CDFA's category C list and/or having a rating of "high" or "moderate" on the Cal-IPC list were identified on the Study Area (Appendix D). There are no species rated as "high" for invasiveness and listed in category C, on the Study Area. Several species rated as "high" on the Cal-IPC list are present on the site including yellow star-thistle (*Centaurea solstitialis*), and medusa head (*Elymus caput-medusae*). Other more widespread invasive species, such as poison hemlock (*Conium maculatum*), slender oats, and hare barley (*Hordeum murinum*), are rated "moderate" for invasiveness and not listed in category C. All of these species would be expected to occur in the Study Area as they are fairly common in disturbed areas in the region.

5.5 SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code (i.e., riparian areas) and/or Sections 401 and 404 of the CWA, which include wetlands and other waters of the U.S. and State.

Sensitive natural communities were identified in the Study Area that include aquatic resources and riparian habitat identified in Section 5.5.1 and discussed in Section 5.3.

5.5.1 Aquatic Resources and Riparian Habitat

A total of 159.79 acres of habitats containing aquatic resources have been identified in the Study Area consisting of consisting of perennial marsh (17.30 acres), seasonal marsh (1.78 acres), perennial drainages (8.83 acres), intermittent drainages (1.16 acres) and vernal pool system grassland complex (130.72 acres). A total of 130.72 acres of vernal pool system grassland habitat is a complex of upland and wetland habitats, and only portions of this habitat that meet wetland criteria would be considered

as potential waters of the U.S. and/or waters of the State. The intermittent drainages and perennial drainages are likely considered waters of the U.S. and water of the State subject to USACE and RWQCB jurisdiction under Sections 404 and 401 of the CWA. The valley foothill riparian (14.88 acres) habitat also falls under the jurisdiction of Section 1600 of the California Fish and Game Code, which includes riparian areas. A formal aquatic resource delineation was not conducted in conjunction with this BRA.

5.5.2 Wildlife Migration Corridors

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. This fragmentation of habitat can also occur when a portion of one or more habitats is converted into another habitat; for instance, when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or construction activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The four drainages in the Study Area provide a wildlife migration corridor for aquatic wildlife and associated riparian habitat provides habitat for nesting birds and roosting bats. However, the Study Area is surrounded by urban development with busy roadways, and generally does not provide connectivity to adjacent habitat for wildlife. Implementation of the Project would not affect any wildlife migration corridors and will not disrupt the flow or water quality of the Ulatis Creek watershed.

5.6 HABITAT CONSERVATION PLAN

The Study Area is within the plan area of the Solano HCP, which is currently in the draft stages and is not a final document or plan as of the date of this report. If the Solano HCP becomes final prior to Project initiation, the Project proponent may apply for coverage under the Solano HCP. The General Plan policy COS-P1.12 for the City defers to the draft Solano HCP until it is adopted and requires compliance with the applicable Avoidance, Minimization, and Mitigation Measures listed in the Draft Solano HCP (that are applicable to Vacaville, which are provided in Section 6.0).

5.7 TREE PRESERVATION

Trees protected by the City of Vacaville are present in the Study Area in addition to trees associated with approximately 14.88 acre of valley foothill riparian habitat. A tree permit will be required from the Director of Public Works with the City prior to removal of any public trees. Mitigation shall be completed as required and typically includes planting of replacement trees on or off-site, payment of in-lieu fees, or preservation of trees onsite.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The 276-acre Study Area is comprised of urban, annual grassland, ruderal, ditch, perennial marsh, seasonal marsh, valley foothill riparian, vernal pool system grassland, intermittent drainage, and perennial drainage. Sensitive habitats that include jurisdictional wetlands and other waters and riparian

habitat were also observed on-site. There is suitable habitat to support special-status plant and wildlife species identified in the database query. In addition, the Study Area and vicinity provide suitable nesting habitat for raptors and migratory birds, which could be affected by proposed Project activities.

Known or potential biological constraints in the Study Area include:

- Potential habitat for special-status plant species that include bitterscale, vernal pool smallscale, papoose tarplant, hispid bird's-beak, recurved larkspur, dwarf downingia, San Joaquin spearscale, adobe-lily, Boggs Lake hedge-hyssop, Contra Costa goldfields, legenere, little mousetail, Baker's navarretia, bearded popcornflower, California alkali grass, two-forked clover, and saline clover;

- Potential habitat for special-status wildlife species that include Crotch's bumble bee, vernal pool fairy shrimp, vernal pool tadpole shrimp, valley elderberry longhorn beetle, western spadefoot, California tiger salamander, northwestern pond turtle, tricolored blackbird, grasshopper sparrow, burrowing owl, Swainson's hawk, northern harrier, white-tailed kite, and pallid bat;

- Potential habitat for nesting migratory birds and raptors;

- Public trees protected by the City of Vacaville and

- Potentially jurisdictional waters of the U.S., State, and habitats regulated by CDFW.

6.1 RECOMMENDATIONS

The General Plan policy COS-P1.12 for the City of Vacaville defers to the draft Solano HCP until it is adopted and requires compliance with applicable Avoidance, Minimization, and Mitigation Measures listed in the Draft Solano HCP (that are applicable to Vacaville) and provided in Appendix A of the General Plan (City of Vacaville 2015). Applicable measures are provided below.

6.1.1 General Construction Best Management Practices

6.1.1.1 Vehicular/Equipment Operation

1. When working in or adjacent to wetlands (e.g., vernal pools, seasonal wetlands, and marshes), streams, and riparian areas, the number of new temporary access routes or use of existing access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal. The boundaries of all new and existing access routes shall be clearly marked or flagged. These areas shall be outside of preserved riparian, wetlands, and other sensitive areas.

2. All fueling and maintenance of vehicles and other mechanized equipment shall be conducted in designated areas located at least 100 feet away from any aquatic habitat where possible. Each designated fueling/maintenance area shall be protected by a containment barrier designed to prevent any spilled or leaked fuel or other contaminants from running into an aquatic habitat. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

3. All vehicles and other mechanized equipment used during construction shall be checked for oil, fuel, and coolant leaks prior to initiating work. Any equipment found to be leaking fluids shall not be used in or around aquatic habitat features.

4. The potential for wildfires shall be reduced by parking vehicles away from vegetation and by the use of shields, protective mats, and other fire prevention methods when welding, grinding, or conducting other activities that are likely to create a fire hazard. All construction sites shall have adequate sources of water, shovels, and fire extinguishers available for immediate use. All vehicles and heavy equipment used on construction sites shall have on-board fire extinguishers.

5. During the dry season, vehicles shall never be parked or idled so that the undercarriage is in contact with vegetation.

6. In order to reduce the risk of spreading harmful pathogens into natural areas, vehicles and construction equipment that have been off-road in natural areas shall have their tires thoroughly cleaned (by manual scrubbing down or cleaning with a pressure washer) before the vehicle/equipment is allowed to be used in other natural areas. If the vehicle or equipment was operated in a creek or stream, the tires shall also be decontaminated by one of the following procedures:

    a. Allowing the tires to completely dry (for at least 24 hours) before being allowed use or entry in or in the vicinity of another creek or stream.

    b. Cleaning with a 5-percent bleach solution or 99-percent copper sulfate pentahydrate solution (3/4 teaspoon per gallon of water).

    c. Vehicular cleaning work shall be conducted in self-contained work areas at least 100 feet from any aquatic habitat; wash water shall not be disposed of in any natural areas.

6.1.1.2 Work Area Maintenance/Hazardous Materials

1. Food, trash, and other solid wastes shall be disposed of in properly contained, covered refuse containers and regularly removed from the various structures and facilities. Following construction, all trash and construction debris shall be removed from the work area.

2. Building material storage areas containing hazardous or potentially toxic materials shall have an impermeable membrane between the ground and the hazardous material and shall be bermed to prevent the discharge of pollutants to groundwater and storm water runoff.

3. Materials deleterious or toxic to fish and wildlife including, but not limited to, asphalt, tires, concrete, construction materials, treated wood, and creosote-containing materials must be stockpiled in bermed containment areas that are lined with an impermeable membrane and designed to hold 125 percent of the total capacity of stored materials. All such materials may not be stored within 100 feet from the edge of any water body for more than 48 hours. Contaminated absorbent materials shall be stored in each containment area. Water collected in containment areas shall be disposed of according to federal, State, and local regulations.

4. An emergency response and cleanup plan shall be prepared prior to beginning work at the site. The plan shall detail the methods to be used to contain and clean up spills of petroleum products or other hazardous materials in the work area.

5. Containers for storage, transportation, and disposal of contaminated absorbent materials shall be provided on the project site. Petroleum products and contaminated soils shall be disposed of according to federal, State, and local regulations.

6.1.1.3 Erosion Control and Water Quality Management

1. A Storm Water Pollution Prevention Plan (SWPPP), prepared in accordance with the State Water Resources Control Board (SWRCB), National Pollutant Discharge Elimination System (NPDES) Construction General Permit, shall be implemented for all construction activities where required under SWRCB regulations. The SWPPP shall include Best Management Practices (BMPs) for controlling sediment, turbidity, and the release of other pollutants into aquatic habitats during construction. The SWPPP shall be subject to the approval of the Regional Water Quality Control Board (RWQCB) prior to the start of work.

2. Seed mixes shall be composed of native or noninvasive naturalized species. No invasive exotic plant species shall be allowed, including those identified in the California Exotic Pest Plant Council's database, which is accessible at: http://www.cal-ipc.org/ip/inventory/weedlist.php.

3. Any concrete structures below the tops of banks of creeks, wetlands, or other aquatic habitats shall be poured in tightly sealed forms and shall not be allowed contact with surface waters until the cement has fully cured (minimum of 30 days). During that time, the poured concrete shall be kept moist, and runoff from the concrete shall not be allowed to enter aquatic habitats. Commercial sealants may be applied to the poured concrete surface in locations where the exclusion of water flow for a long period is difficult. If a sealant is used, water shall be excluded from the site until the sealant is dry and fully cured according to the manufacturer's specifications.

4. Water that contacts wet concrete and has a pH greater than 9.0 shall be pumped out and disposed of outside an aquatic habitat.

5. No substances toxic to aquatic life shall be discharged or allowed to leach into an aquatic habitat. Every reasonable precaution to protect aquatic habitats from pollution with fuels, oils, bitumens, calcium chloride, dust suppressants, and other harmful materials shall be implemented.

6. If cofferdams and pumps are used to isolate and dry channel work areas, the water pumped from a work area shall not be allowed to re-enter the stream channel until sediment has settled out using a settling pond, silt basin, Baker tank, or similar detention/settling device. 7. Booms with attached silt curtains with filtering capabilities shall be used around dredging areas to minimize the spread of resuspended sediments in the water column.

6.1.1.4 Diversion and Dewatering

1. Water drafting, pumping, or other water diversion shall be done in a manner that is not harmful to fish or other aquatic or semiaquatic life. Pump in-flow tubes or hoses shall be screened in a

0.5- millimeter mesh-screened cage to exclude aquatic wildlife that may otherwise be harmed in the process.

2. Any equipment or structures placed in the active channel for water drafting, pumping, or diversion shall be done in a manner that: (a) prevents pollution or siltation, (b) provides sufficient water to pass downstream to maintain adequate flows and temperature for aquatic life below the obstruction, and (c) restores normal flows to the affected stream reach immediately upon completion of work.

6.1.1.5 Worker Training

When working in or adjacent to sensitive habitat areas, construction personnel shall receive training concerning sensitive species and habitat occurring in the project area. Training shall be provided by a qualified biologist and shall include:

1. Descriptions of the sensitive habitats, special-status, and regulatory requirements for protection of biological resources potentially occurring with work areas;

2. All routine measures required to protect the species/Natural Community during work and the possible State and/or federal penalties for not complying with these requirements;

3. The requirement to stop all work and notify a supervisor or the project biologist if a special-status species is observed in the project site; and

4. Construction personnel shall report to their supervisor any observed incident of death or injury to any State or federally listed threatened or endangered species or damage to a protected habitat area. The supervisor shall immediately notify the City and shall report to the United States Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Association, National Marine Fisheries Service (NOAA NMFS), and/or California Department of Fish and Wildlife (CDFW), as appropriate. The report shall be made to the appropriate agencies within 24 hours of the incident and shall include pertinent information such as the date, time, location, species or habitat, and possible cause of the incident (if known).

6.1.1.6 Vegetation Management Measures

1. Mechanical control methods such as mowing shall be used as an alternative to the application of herbicides whenever practicable in or near sensitive habitats and areas known to or likely to support special-status species, including riparian and marsh areas, creeks, ponds, vernal pools, and other seasonal wetlands and coastal marshes.

2. Mass application of herbicides shall be avoided to the maximum extent practicable. Spot spraying or more localized applications shall be used instead.

3. Herbicide mixing shall be limited to areas not prone to runoff such as concrete mixing/loading pads, disked soil in flat terrain, or graveled mixing pads.

4. The use of all herbicides shall comply with the requirements specified on the pesticide product labeling and Solano County Department of Pesticide Regulation regulations.

6.1.1.7 Exclusion Fencing

1. Exclusion fencing, when required, shall be installed and maintained between project work areas and adjacent preserved habitat during all work activities. Exclusion fencing shall be installed prior to required preconstruction surveys and will consist of silt fabric, plywood, aluminum, or other City-approved material. Exclusion fences shall be designed and installed to achieve species and habitats protection objectives based on recommendation from a qualified biologist or as required under applicable permits from USFWS, CDFW, US Army Corps of Engineers, or RWQCB. In general, fences shall be pulled taut at each support to prevent folds or snags. A-5 Support poles will be located on the inside of the exclusion area. Construction personnel will also install an orange plastic-mesh construction fence 1 foot on the development side of the exclusion fence to increase visibility unless the exclusion fence is composed of high visibility materials. Exclusion fencing shall be inspected weekly and repaired immediately when damage is observed during construction work.

6.1.2 Natural Community and Associated Species Measures

6.1.2.1 Valley Floor Grassland and Vernal Pool

This section provides avoidance and minimization measures for species and sensitive habitats in the Valley Floor Grassland and Vernal Pool Natural Community.

Habitat Avoidance. Maximum avoidance as determined during the City's environmental review, is required in the following locations where:

1. The wetlands contribute to the habitat quality and value of reserve/preserve lands established (or expected to be established) in perpetuity for conservation purposes;

2. The wetlands are adjacent to or contiguous with riparian or stream corridors, or other permanently protected lands; and

3. The wetlands are located in or contiguous to High Value Vernal Pool Conservation Areas.

Where temporary or permanent fill is proposed in any vernal pools or other seasonal wetlands, the project proponent shall provide documentation explaining why avoidance is not practicable.

Site Design Standards. The following site design standards shall apply to all development activities that would affect Valley Floor Grassland and Vernal Pools:

1. All avoided areas shall be preserved and managed consistent with General Plan Policies COS-P1.2 and COS-P1.3 and Action COS-A1.4.

2. Development shall be designed to minimize direct and indirect impacts to wetlands and edge effects to preserved areas.

3. The applicant shall incorporate measures into the project design to accomplish the following:

    a. Preserve and maintain sufficient unaltered watershed area to prevent significant adverse changes in water quality and the volume and timing of inflows to preserved wetlands.

b. Avoid changes in nutrient input from adjacent upland sources into preserved wetlands.

c. Provide sufficient upland habitat to support associated amphibian and terrestrial fauna and vernal pool plant pollinator species.

d. Accommodate linkages/corridors between individual aggregations of vernal pools in a larger vernal pool complex.

e. Provide a terrestrial buffer to protect the core wetland and associated upland habitat from edge effects associated with surrounding land uses (i.e., prohibit backyards from backing up to preserves, place firebreaks on the development side of preserve/development boundaries, and provide for a vegetated buffer between roads and preserve boundaries).

f. Minimize the potential for spread of invasive species from the development into preserved lands.

4. Development shall not isolate existing populations or suitable habitat areas. To maintain connectivity between adjacent reserves, a corridor shall be established linking these areas.

Buffer Criteria for Development Activities. Vegetated buffers shall be established around preserved vernal pools and seasonal wetlands. Buffers shall be consistent with the following criteria:

1. Vegetated buffers shall consist of valley floor grassland and vernal pool vegetation and/or other natural vegetation (i.e., oak savanna/woodland, coastal marsh or riparian habitats, if applicable).

2. Buffers shall not contain any irrigated or landscaped lands, fire breaks, or public or maintenance access trails or roads.

3. Buffers shall be preserved in perpetuity and managed consistent with Policy COS-1.3.

Biological Monitor. A qualified biologist shall monitor all ground-disturbing activities within 100 feet of preserved habitats (or as otherwise specified for species-specific avoidance requirements) to ensure that no unnecessary take of listed species or destruction of their habitat occurs. The biologist shall have the authority to stop all activities that may result in such take or destruction until appropriate corrective measures have been completed. The biologist shall immediately notify the City of any unauthorized impacts and shall report to the USFWS and CDFW within 24 hours of any activities that result in take of listed species.

The biological monitor shall provide instructions to all on-site construction personnel regarding the presence of listed species, the measures required by law to avoid impacts to vernal pool species and their habitat, and the possible penalties for not complying with these requirements.

Habitat Protection During Work Activities. Vernal pool habitat and adjacent grassland/upland areas within the immediate work areas shall be identified and marked in the field prior to staging and construction/ground-disturbing activities.

1. Exclusion fencing shall be installed prior to any required preconstruction surveys and maintained between project work areas and adjacent preserved habitat during all work activities. Exclusion fencing will consist of silt fabric, plywood, aluminum, or other material

approved by a qualified biologist or mandated in respective State or federal permits. In California tiger salamander habitat, the base of the fence will be buried a minimum of 3 to 5 inches in the ground to prevent animals from crawling under and be a minimum of 3 feet in height above ground to serve as a barrier for animals moving on the ground surface. Exclusion fences shall also include provisions (e.g., ramps, one-way doors, or exit funnels) for California tiger salamanders and reptile and amphibian species to leave the work area. The fence will be pulled taut at each support to prevent folds or snags. Construction personnel will also install an orange plastic-mesh construction fence 1 foot on the development side of the exclusion fence to increase visibility unless the exclusion fence is composed on high visibility materials. Exclusion fencing shall be inspected weekly and repaired immediately when damage is observed during construction work.

2. The following activities are prohibited, except as otherwise identified in an approved management plan, in all protected vernal pool and grassland habitat: (a) alteration of existing topography or any other alteration or uses for any purposes, including the exploration for or development of mineral extraction; (b) erection of any new structures; (c) dumping, burning, and/or burying of rubbish, garbage, or any other wastes or fill materials; (d) building of any new roads or trails; € killing, removal, or alteration of any existing native vegetation; (f) placement of storm water drains; and (g) use of pesticides or other toxic chemicals inconsistent with the product labeling.

6.1.2.2 Riparian, Stream, and Freshwater Marsh

The Riparian, Stream, and Freshwater Marsh Natural Community avoidance and minimization measures apply to all freshwater, aquatic, marsh and riparian habitats in Vacaville, excluding vernal pools and seasonal wetlands associated with the Valley Floor Grassland and Vernal Pool Natural Community.

Habitat Avoidance. Consistent with General Plan Conservation and Open Space Element Goal COS2 and associated policies, project proponents shall avoid activities that will result in the loss of riparian or stream habitat that meet any one of the following conditions:

1. Riparian, stream, and associated buffer habitats located in Priority Drainages and Watersheds.

2. More than 300 feet of channel in first or second order streams lacking woody riparian vegetation.

3. Second order streams with riparian vegetation.

4. Third, fourth, and higher order streams in non-priority watersheds.

5. Activities that will create a significant barrier to wildlife movement along the stream corridor and/or significantly affect hydrological connectivity.

If project proponents are proposing to fill any portion of a stream or permanently remove riparian habitat in any of the conditions described above, they must provide documentation explaining why avoidance is not practicable and/or would not contribute to the General Plan Conservation Element goals, policies, and actions. In general, the level of documentation required for a project varies by the significance of the project. Activities involving perpendicular crossings for roads or utility lines are preferable and will generally require less documentation than longitudinal impacts.

Setbacks and Buffer Zones. Native vegetated buffer zones shall be established between development and stream corridors to protect riparian and stream habitats in accordance with the following standards:

1. For infill projects (must be 5 acres or less in size and be located between two adjacent developments bordering the stream channel (one upstream and one downstream), buffer zone widths shall, at a minimum, correspond to existing buffer widths found in the existing adjacent developed areas or a minimum of 1.5 times the drip line of trees and shrubs at maturity, whichever is greater. To the maximum extent practicable, buffer zones shall be widened to accomplish all of the following: (a) restoration of historic riparian vegetation stands; (b) establishment of protected zones of riparian vegetation that are at least the width of four mature riparian tree canopies; and (c) incorporation of existing native perennial upland vegetation (e.g., native grassland, oak woodland, elderberry stands, and other native shrubs).

2. For projects in the urban expansion areas along third or higher order streams and lower order streams that support riparian vegetation, buffer zones shall extend at least 100 feet from either: (a) the top of the bank, or (b) the outside edge of the existing riparian vegetation, whichever distance is greater.

3. Development may encroach into the buffer zone required under Conditions 1 and 2 provided that offsets are provided elsewhere in the buffer zone. The offsets shall be situated in the remainder of the buffer zone and shall be equal or greater in size to the encroachment areas. Under no circumstances shall the total area of all encroachments exceed 25 percent of the total buffer zone area or length as specified in Condition 2.

4. The outer edges of the buffer (not to exceed 25 percent of the buffer width along third or higher order streams and lower order streams that support riparian vegetation) may also be used for public access and passive recreation such as hiking, wildlife viewing, and bicycling. For avoided first and second order streams lacking riparian vegetation, public access is limited to no more than 5 percent of the outer edge of the buffer.

5. For projects in the urban expansion areas along avoided first and second order streams lacking riparian vegetation, stream setbacks shall be at least 25 feet from the top of the bank.

6. For those projects that involve reconstruction/restoration of channelized streams (including both widening of riparian corridors and re-establishment of watercourse meander patterns), setbacks shall be at least 50 feet from either: (a) the top of the bank, or (b) the edge of the restored riparian corridor, whichever distance is greater. Creating meanders from a straight watercourse will require a wide area that encompasses the meanders and the additional 50 feet buffer from the top of bank (of the edge of the meandering watercourse) or edge of riparian vegetation (of a non meandering watercourse). This area should provide a sufficient buffer for the watercourse and can support other native upland communities such as grasslands and oak woodlands.

7. All buffers and avoided habitats shall be preserved and managed consistent with General Plan Policies COS-P1.2 and COS-P1.3 and Action COS-A1.4.

6.1.2.3 Project Implementation and Construction

This section addresses the mandatory avoidance and minimization requirements for the post-project approval/project implementation and construction requirements.

Riparian Tree Protection. Where trees and/or riparian shrubs are present and will be preserved, the following measures shall be implemented:

1. Ground disturbance shall avoid the drip line of the riparian trees and shrubs. Temporary construction fencing shall be placed at the edge of the work outside the edge of the tree drip lines. No construction work, storage of equipment or materials, or other disturbance shall be allowed in the protected areas.

2. Excavation work within a distance of 1.5 times the radius of the drip line or within a 25-foot radius of the drip lines, whichever is greater, of native riparian trees shall be done with hand tools or with light mechanized equipment (e.g., mini or light excavator or backhoe) in order to minimize disturbance or damage to roots.

3. An air spade or the equivalent shall be used to aerate and loosen any compacted soil in the structural root zone of protected trees to minimize physical injury to the tree roots.

4. Branch or root pruning of native riparian trees, if required, shall be conducted under the supervision of a Certified Arborist.

5. Equipment staging areas/storage areas shall not be located within a distance of 1.5 times the radius of the drip line or within a 25-foot radius of the drip line, whichever is greater, of native riparian trees.

6. Fill, gravel, or other construction materials shall not be stockpiled in the drip lines of native riparian trees.

Dewatering Activities. Water drafting, pumping, or other water diversion shall be done in a manner that is not harmful to fish or other aquatic or semi-aquatic life:

1. Pump inflow tubes or hoses shall be screened within a 0.5 millimeter mesh-screened cage to exclude aquatic wildlife that may otherwise be harmed in the process.

2. Prior to dewatering, a qualified biologist shall capture and relocate any native fish or other native vertebrate species found at the project site. Captured animals shall be relocated to another suitable water body preapproved by CDFW unaffected by the work or downstream of the work area (Transportation of exotic wildlife, without appropriate permits, is prohibited under California Fish and Game Code). All nonnative invasive species shall be captured, removed from the project site, and humanely euthanized.

3. All dewatering shall be pumped into a temporary siltation pond/desilting basin, Baker tank, or similar detention device in order to allow adequate time for settling of sediments prior to their release downstream in accordance with the approved SWPPP.

4. Following adequate settling time, water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

5. If coffer dams are used, turbid water pumped out of the dam shall not re-enter the channel until the sediment has settled out to prevent any increase in turbidity in downstream waters.

Habitat Protection and Site Restoration. The following measures shall be implemented to minimize impacts to stream and riparian habitats:

1. Disturbed areas shall be hydroseeded or stabilized using other erosion control measures prior to October 15. Hydroseed mixes used along and immediately above stream banks to stabilize disturbed areas shall not contain fertilizers or nonnative invasive species. When necessary, the City, in consultation with CDFW, may grant extensions of this deadline on a case-by-case basis.

2. Streambed and bank construction work shall not create any physical barriers to fish migration such as artificial berms or a uniformly flat channel profile.

3. Bank stabilization projects shall also incorporate bioengineering techniques and other measures to promote re-establishment of native vegetation (e.g., anchored rootwads or ballast bucket plantings in riprap). The use of hardscape such as rock riprap and floodwalls shall be minimized.

4. All debris, sediment, rubbish, vegetation, or other material removed from the channel banks, channel bottom, or sediment basins shall be disposed of at an approved upland disposal site.

5. Excess drainage from the construction site shall be routed away from riparian, stream, and freshwater marsh habitats.

6. Any riprap placed such that it will encounter water shall incorporate large woody cover (logs), other applicable bioengineering techniques, and/or vegetation planting depending on the character of the surrounding (natural) stream banks.

7. During construction, inspection of in-stream habitat and performance of sediment control devices shall occur at least once a day when there are surface waters in the channel to ensure devices are functioning properly.

8. Where erosion control blankets are placed in riparian zones, plantings of native riparian trees and shrub species shall occur in small openings in the erosion control blanket.

9. Plastic monofilament or wire mesh straw waddles or erosion control blankets shall not be used. Only erosion control materials (e.g., blankets, roles, and mats) with a minimum 2-inch square mesh made of natural coir fibers or other netting approved by CDFW shall be used.

Valley Elderberry Longhorn Beetle. Visual evidence of valley elderberry longhorn beetle is not always evident; for the purposes of compliance with the Solano HCP, all elderberry plants with stems meeting this minimum size should be considered occupied habitat. The following measures apply to all activities that would entail ground-disturbing activities within 100 feet of elderberry plants:

1. A minimum setback of 20 feet from the drip line of each elderberry plant shall be established between the development and all elderberry plants containing stems measuring 1 inch in diameter or greater at ground level, except where elderberry plants are established immediately along existing roads or other paved or graveled surfaces (e.g., sidewalks, bike/pedestrian paths, and facility access roads). The setback shall be fenced and flagged consistent with the general construction avoidance and minimization measures for exclusion fencing in order to prevent encroachment of equipment and materials.

2. Where elderberry plants are established adjacent to existing roads and facilities, construction avoidance fencing shall be provided to protect the trunk and main stems of the plant.

3. All contractors shall be briefed on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements. Work crews shall be instructed on the status of the Valley Elderberry Longhorn Beetle and the need to protect its elderberry host plant.

4. Signs shall be placed every 50 feet along the edge of the buffer zone with the following information: *"This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Federal Endangered Species Act. Violators are subject to prosecution, fines, and imprisonment."* The signs shall be clearly readable from a distance of 20 feet and must be maintained for the duration of construction.

5. Routine trimming of overgrown and overhanging elderberry shrubs that may pose a human safety threat along pathways, trails, bike paths, roadways shall adhere to the following restrictions:

    a. Only branches and stems less than 1 inch in diameter may be trimmed or cut.

    b. Trimming may only occur between September 1 and March 14. Trimming is recommended from November through the first two weeks in February, when plants are dormant and have lost their leaves.

    c. Trimming shall not occur after the shrubs have leafed out (when adult valley elderberry longhorn beetles are likely to be active).

    d. Vegetation clearing within 5 feet of elderberry shrub stems shall be done by hand (e.g., pulling or clipping).

6. Following completion of construction work affecting the buffer zone, any damage done to the buffer zone shall be restored using native erosion control seed mixes and native riparian plant species, as appropriate.

7. After construction, buffer zones must continue to be protected from adverse effects of the development project. Protection measures such as fencing and signage shall be included in the project plans and are subject to the approval of the City.

8. No insecticides, herbicides, fertilizers, or other chemicals that might harm the valley elderberry longhorn beetle or its host plant shall be used in the buffer areas or within 100 feet of any

elderberry plant with one or more stems measuring 1 inch in diameter or greater at ground level.

9. Fire fuel breaks (disked land) may not be included within the 100-foot setback; however, vegetation in the setback may be cleared by mowing (e.g., mower, mechanical trimmers, or hand tools) to less than 2 inches in height. The mowing of grasses/ground cover in the buffer zone may occur from July through April to reduce fire hazards. No mowing shall occur within 5 feet of elderberry plant stems. Mowing must be done in a manner that avoids damaging plants (e.g., stripping away bark through careless use of mowing/trimming equipment).

10. A qualified biologist shall be retained to monitor implementation and compliance of all the above measures.

Tricolored Blackbird. The following measures are for development activities that are within 250 feet of suitable tricolored blackbird breeding habitat:

1. During the breeding season (February 1 through August 31), a qualified biologist shall conduct pre-construction surveys for all development activities in known or suitable nesting habitat areas no more than 15 days prior to scheduled work. Suitable nesting habitat includes any of the following: (a) dense vegetation near open water; (b) emergent marsh vegetation, especially cattails and tules; (c) thickets of willow, blackberry, wild rose, or thistles; (d) silage and other grain fields such as sorghum.

   Pre-construction surveys shall be conducted for each phase of development. If ground-disturbing activities are delayed or suspended for more than 15 days following completion of the preconstruction survey, a qualified biologist shall resurvey the site and shall conduct a second follow-up survey at least five days prior to the start of construction activities.

2. A minimum 250-foot buffer shall be established between work activities and any active nests. Construction buffers may be reduced under the following conditions:

   a. A site-specific analysis prepared by a qualified biologist indicates that construction activities would not adversely affect nesting birds. The City, in consultation with CDFW, must approve the analysis in writing before construction can proceed.

   b. Nesting birds do not exhibit significant adverse reaction to construction activities (e.g., changes in behavioral patterns or reactions to noise) based on sufficient monitoring (minimum of three consecutive days following construction initiation). Construction will stop if a significant adverse reaction is observed during any of the monitoring days and will only commence again with a 250-foot buffer once behavioral patterns return to preconstruction activities.

   c. Additional monitoring shall be required any time there is a change in heavy equipment use or activity that results in greater noise levels. A change in heavy equipment use or greater noise levels that may require additional monitoring will be determined by a qualified biologist.

   d. Monitoring is continued at least once a week through the nesting cycle until the young have fledged and left the nest area.

e. Monitoring reports are submitted to the City.

3. The qualified biologist has the authority to stop work at any time if signs of disturbance to the nesting colony are noted. If adverse effects are identified, construction activities shall cease immediately, and construction shall not resume until City and CDFW are consulted to determine if construction may continue under modified restrictions or shall be suspended until nesting activity is complete.

Swainson's Hawk

The following avoidance and minimization measures are applicable to almost all development activities in the city. These measures are primarily intended for compliance with the Federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, Sections 3503 and 3503.5, regarding protection requirements for active bird nests. Removal of known Swainson's hawk nests may also require an incidental take permit from CDFW. While the long-term viability of protecting traditional Swainson's hawk nest sites in urban environments is questionable, Swainson's hawk has been documented to persist and continue to nest in urban settings for many years. Therefore, the following measures require protection of traditional nest sites in urban areas where retention of the nest tree or associated grove of trees does not create a health or safety hazard or is impracticable from a project design and cost consideration.

Nest Tree Preservation. Trees with active Swainson's hawk nests or with historically active nests (i.e., occupied within the last ten years) shall be avoided to the maximum extent practicable. Applicants proposing to remove an otherwise healthy nest tree shall provide written justification for the tree removal to the City and CDFW. Sufficient rationale for tree removal shall be primarily based on declining or poor suitability of the tree as a nesting site for Swainson's hawk and/or to meet public safety needs. The justification letter shall provide a clear analysis of the biological value of the tree to Swainson's hawk under pre-project conditions and post-project conditions (if the tree were to be avoided) and will consider the presence of alternate nest sites in the vicinity of the project site. Nest trees shall only be removed if there is a biological basis that the use of the tree is unlikely under post project conditions. The City and CDFW will be responsible for approval of the requests to remove healthy nest trees.

Pre-Construction Nest Surveys. Between March 1 and August 31, a qualified biologist shall conduct pre-construction surveys to identify and subsequently avoid nesting areas for Swainson's hawk. Swainson's hawk in this region is typically incubating during June and active nests can be difficult to find. As such, June surveys may not be acceptable for determining the absence of Swainson's hawk nests. Surveys shall be conducted within 15 days of the anticipated start of construction and shall be designed and of sufficient intensity to document nesting within 0.25 miles (1,320 feet) of planned work activities. If a lapse in project-related construction work of 15 days or longer occurs, additional pre-construction surveys shall be required before project work may be reinitiated.

Active Nest Buffers. Construction work (including grading, earthmoving, and any operation of construction equipment) shall not occur within a 0.25-mile buffer zone around an active Swainson's hawk nest except as provided below. Construction work may commence in the buffer zone when a qualified biologist has confirmed that nesting activity is complete (e.g., Swainson's hawk young have fully fledged and are capable of flight and have left the nest, or the adults have abandoned the nest for a minimum of seven days and there is no evidence of re-nesting activity). Nest trees may be removed between September 16 and February 1 when nests are unoccupied.

The size of nest site buffer zones may be reduced only under the following conditions:

1. A site-specific analysis prepared by a qualified biologist indicates that the nesting pair under consideration are not likely to be adversely affected by construction activities (e.g., the nest is located in an area where the hawks are habituated to human activity and noise levels comparable to anticipated construction work). The City and CDFW must approve this analysis before construction may begin within 0.25 miles of a nest. Construction period nest buffers are more likely to be approved later in the nesting cycle, when the likelihood of nest abandonment is less (e.g., after the young have hatched).

2. Monitoring by a qualified biologist is conducted for a sufficient time (during all construction activities for a minimum of ten consecutive days following the initiation of construction), and the nesting pair does not exhibit adverse reactions to construction activities (e.g., changes in behavioral patterns, reactions to construction noise).

3. Monitoring is continued at least once a week through the nesting cycle at that nest. This longer-term monitoring may be reduced to a minimum of 2 hours in the morning and 2 hours in the afternoon during construction activities; however, additional and more frequent monitoring may be required if any adverse reactions are noted.

4. Weekly monitoring reports shall be submitted to the City and CDFW during construction and monitoring activities.

If adverse effects are identified, construction activities shall cease immediately and construction shall not be resumed until the qualified biologist, in consultation with the City and CDFW, has determined that construction may continue under modified restrictions, or that nesting activity is complete.

Post-Construction Occupied Nest Avoidance. If a nest tree becomes occupied by Swainson's hawk during ongoing construction activities, construction activities shall not occur within 500 feet of the nest, except where monitoring consistent with the criteria above documents that adverse effects will not occur.

Burrowing Owl

The following avoidance and minimization measures are applicable to almost all development activities in the City. These measures are primarily intended for compliance with the Federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, Sections 3503 and 3503.5, regarding protection requirements for active bird nests.

Pre-Construction Surveys. Between February 1 and August 31, a qualified biologist shall conduct pre-construction surveys in known or suitable habitat areas to identify and subsequently avoid nesting areas for burrowing owls. An initial pre-construction survey shall be conducted within 14 days of the anticipated start of construction, followed by a second survey within 24 hours of the start of construction. All surveys shall follow standard CDFW protocols. If a lapse in project-related construction work of 14 days or longer occurs during the nesting season, an additional preconstruction survey shall be required within 24 hours before project work may be reinitiated.

Vegetation Management. If burrowing owls or suitable nesting habitat are identified on site during the initial pre-application surveys, applicants shall allow vegetation to grow over the entire project site

(except for required fuel breaks) to a height of 36 inches or more above the ground, unless impracticable due to surrounding or adjacent land uses. The increased vegetation height, if in place by the beginning of the nesting season (e.g., retention of previous year's growth or planting during the previous winter), will discourage burrowing owl use of the site.

Construction Buffers and Exclusion. The following measures shall be implemented for new construction activities within 160 to 250 feet of an active nest or burrow (depending on the season):

1. During the non-breeding season (September 1 through January 31), a circular exclusion zone with a radius of 160 feet shall be established around occupied burrows.

2. If a buffer cannot be established during the non-breeding season, burrowing owls shall be evicted from the entire construction area using passive relocation techniques. The Applicant shall prepare an Exclusion Plan for review and approval by the City and CDFW. This plan shall address the following minimum requirements:

    a. Protocols to confirm that the burrow(s) is unoccupied by burrowing owls and other species prior to destruction. Protocols shall include:

        1) one-way doors in place a minimum of 48 hours prior to burrow excavation;

        2) twice daily monitoring to confirm evidence that owls have been excluded from the burrow; and

        3) scoping of the burrows to confirm absence.

    b. Procedures for how the burrow(s) will be excavated. Excavation using hand tools with refilling to prevent reoccupation is preferable whenever possible; this may include using piping to stabilize the burrow to prevent collapsing until the entire burrow has been excavated and it can be determined that no owls reside inside the burrow.

    c. Removal of other potential owl burrow surrogates or refugia on site.

    d. Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take.

    e. Measures to make the site inhospitable to burrowing owls and fossorial mammals (e.g., by allowing vegetation to grow tall, heavy disking, or immediate and continuous grading) until activity is complete.

    f. Reports describing the exclusion activities shall be submitted to the City and CDFW.

3. During the breeding season (February 1 through August 31), a qualified biologist shall establish a circular exclusion zone with a radius of 250 feet around each occupied burrow. No construction related activity (e.g., site grading, staking, surveying, or any use of construction equipment) shall occur in the exclusion zone during the breeding season. Once the breeding season is over, passive relocation may proceed as described in Condition 2 above.

4. Construction buffer widths may be reduced from the 250-foot-wide breeding season buffers and 160-foot-wide non-breeding season buffers in accordance with the following requirements:

    a. A site-specific analysis prepared by a qualified biologist indicates that the nesting pair(s) or wintering owl(s) would not be adversely affected by construction activities. The City and CDFW must approve this analysis in writing before construction can proceed.

    b. Monitoring by a qualified biologist is conducted for a sufficient time (during all construction activities for a minimum of ten consecutive days following the initiation of construction), the nesting pair does not exhibit adverse reactions to construction activities (e.g., changes in behavioral patterns or reactions to noise), and the burrows are not in danger of collapse due to equipment traffic.

    c. Monitoring is continued at least once a week through the nesting/wintering cycle at that site, and no change in behavior by the owls is observed. This longer-term monitoring may be reduced to a minimum of 2 hours in the morning and 2 hours in the afternoon during construction activities; however, additional and more frequent monitoring may be required if any adverse reactions are noted.

    d. Monitoring reports are submitted to City and CDFW.

If adverse effects are identified, construction activities shall cease immediately, and construction shall not be resumed until the qualified biologist, in consultation with the City and CDFW, has determined that construction may continue under modified restrictions or that nesting activity is complete.

6.2 ADDITIONAL RECOMMENDATIONS

For special-status plant and wildlife species not specifically referenced in Appendix A: Avoidance and Minimization Measures from the General Plan policy COS-P1.12 for the City of Vacaville (City of Vacaville 2015), avoidance and minimizations measures are provided below.

6.2.1 Special-Status Plants

The Study Area contains suitable habitat for bitterscale, vernal pool smallscale, papoose tarplant, hispid bird's-beak, recurved larkspur, dwarf downingia, San Joaquin spearscale, adobe-lily, Boggs Lake hedge-hyssop, Contra Costa goldfields, legenere, little mousetail, Baker's navarretia, bearded popcornflower, California alkali grass two-forked clover, saline clover. The Study Area could also potentially support elderberry shrubs which provide potential habitat for valley elderberry longhorn beetle. If present within the Study Area, these species could be impacted by the proposed project through grading or vegetation removal activities. Loss of special-status plant populations and elderberry shrubs would represent a potentially significant impact.

The Study Area provides potentially suitable habitat for Contra Costa goldfields, two-forked clover, which are both endangered species under ESA and Boggs Lake hedge-hyssop, an endangered species under CESA. To avoid potential impacts to these species, the following measures are provided as recommendations, but potential impacts to these species and/or potentially suitable habitat for these species may require informal or formal consultation with USFWS under the Endangered Species Act incidental take authorization or with CDFW under CESA if the species is present and expected to be

impacted. To avoid potential impacts to all potentially occurring special-status plant species, the following measures are recommended:

- A qualified botanist should conduct a special-status plant survey within the appropriate identification (blooming) period prior to the initiation of any ground-disturbing activities that affect the Study Area. If no special-status plants are observed, then a letter report documenting the methods and results of the survey should be prepared and submitted to the City and no further measures are recommended.

- If special-status plants are observed within the Study Area, the location of the special-status plants should be marked with pin flags or other highly visible markers and may also be marked by GPS. The project proponent should determine if the special-status plant(s) on-site can be avoided by project design or utilize construction techniques to avoid impacts to the special-status plant species. All special-status plants to be avoided should have exclusion fencing or other highly visible material marking the avoidance area and the avoidance area should remain in place throughout the entire construction period.

- If special-status plants are found within the Study Area and cannot be avoided, the project proponent should consult with the USFWS and CDFW depending on listing status to determine appropriate measures to mitigate the potential impact to special-status plant populations. These measures may include gathering seed from impacted populations for planting within nearby appropriate habitat, preserving or enhancing existing off-site populations of the plant species affected by the project, or restoring suitable habitat for special-status plant species habitat as directed by USFWS and CDFW.

6.2.2 Special-Status Wildlife

6.2.2.1 Crotch's Bumble Bee

The Study Area contains suitable nesting, foraging, and overwintering habitat for Crotch's bumble bee. To avoid potential impacts to this species, the following mitigation measures derived from the CDFW Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Species (CDFW 2023b) are recommended:

A qualified biologist familiar with California bumble bee species should conduct preconstruction surveys to confirm the presence or absence of Crotch's bumble bee before the implementation of Project-related activities. Surveys should be conducted during the Colony Active Period (April to August) and when floral resources are present, ideally during peak bloom.

- Before Project implementation, at least three on-site surveys should take place, and each survey should ideally be spaced two to four weeks apart during the Colony Active Period (April to August). Surveys should occur during the day (at least an hour after sunrise and at least two hours before sunset, though ideally between 9 AM and 1 PM) on warm but not hot, sunny days (65 to 90 degrees F), with low wind (less than eight mph). Specific survey protocols should follow industry standards from related published protocols and can include modified implementation of the USFWS rusty patched bumble bee protocol and/or California Bumble Bee Atlas non-lethal protocol. Survey methodology should remain consistent with the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Species (CDFW

2023b). Even if surveys from a particular project site failed to detect bumble bees one year, project proponents should perform a full round of surveys in each year that project activities will occur, or assume presence.

- If Crotch's bumble bee is not found during the multiple rounds of focused surveys within suitable nesting, foraging, and/or overwintering habitat, it is recommended that a biological monitor be on-site during initial vegetation removal or ground disturbing activities that take place during any of the Queen and Gyne Flight Period and Colony Active Period (April to October for Crotch's bumble bee).

- If a CESA-protected bumble bee individual or colony is identified in the Study Area or within 25 feet, the project proponent may propose site-specific measures to avoid take (such as work-exclusion buffers) or consult with CDFW to obtain an Incidental Take Permit (ITP) if take of CESA-protected bumble bees may occur and be impacted by Project activities.

6.2.2.2 Special-Status Branchiopods

Special-status branchiopods that include vernal pool fairy shrimp, a federally threatened species, and vernal pool tadpole shrimp, a federally endangered species have a high potential to occur in various aquatic features within the Study Area. Listed invertebrate species are assumed to be present in suitable habitat within their range unless a complete protocol-level survey, consisting of one wet-season survey and one dry-season survey, results in no evidence of the listed species. The surveys should follow the (2017) USFWS Survey Guidelines for the Listed Large Branchiopods and be conducted by a USFWS-approved biologist.

If the species are found to be absent with survey results and the USFWS accepts the survey findings, then no mitigation for listed vernal pool invertebrates is likely required. If the species are present, or if the project proponent decides to assume presence without conducting the surveys, then mitigation for listed vernal pool invertebrates would be required. Assumed presence may be decided by the project proponent prior to construction and mitigation for assumed presence would be determined by the USFWS and CDFW.

If mitigation for listed vernal pool invertebrates is required and the Project has a federal nexus (e.g., is pursuant to a USACE permit, is federally funded, or occurs on federal land), impacts can be addressed through Section 7 consultation with the USFWS. If the Project does not have a federal nexus, the project proponent, through coordination with the USFWS, can prepare a Habitat Conservation Plan under Section 10 of FESA. Typically, the USFWS requires compensatory mitigation for impacts to these species at a 3:1 ratio (3:1 preservation of occupied habitat typically). Possible mitigation opportunities include offsite preservation of occupied offsite habitat or purchase of habitat credits at a qualified mitigation bank.

6.2.2.3 Western Spadefoot

Western spadefoot has the potential to occur in the Study Area within uplands and various aquatic resources. Upon completion of the Project, suitable habitat for this species in the Study Area will continue to provide habitat for this species. Impacts that could harm special-status amphibians would be considered potentially significant. Impacts to this species may require permits or consultation with State and/or federal agencies. To avoid potential impacts to these species, the following measures are

provided as recommendations, but consultation with State and/or federal agencies may be needed to refine these dependent upon the project design:

- If possible, conduct all grading and land disturbing activities outside of the breeding season for western spadefoot (breeding season is generally October to May for western spadefoot) to avoid potential impacts to dispersing individuals.

- A qualified biologist should conduct a pre-construction survey for western spadefoot within 24 hours prior to the start of grading or land disturbing activities. If the survey shows that there is no evidence of this species, then a letter report should be prepared to document the survey and be provided to the project proponent and no additional measures are recommended. If development does not commence within 24 hours of the survey, or halts for more than 7 days, then an additional survey is required prior to starting or resuming work.

    - If western spadefoot is observed during the survey, no work shall occur until CDFW and/or USFWS has been consulted to determine appropriate mitigation and avoidance measures. Any western spadefoot observed during biological monitoring activities will be reported to the CNDDB.

6.2.2.4 Northwestern Pond Turtle

Northwestern pond turtle may occur in the Study Area and could potentially be impacted by the proposed Project. If present in the drainages, wetlands, or upland areas in the Study Area at the time of construction, impacts to northwestern pond turtle could result from coming into contact with construction equipment or personnel, loss of habitat, displacement from current habitat, or loss of a nest. Upon completion of the Project, suitable habitat for this species in the Study Area will continue to provide habitat for this species. Impacts that could harm northwestern pond turtle or result in loss of a nest would be considered potentially significant. Potential impacts to the federally proposed threatened northwestern pond turtle, and potentially suitable habitat for this species may require consultation with USFWS and/or CDFW. To avoid potential impacts to this species, the following measures are provided as recommendations:

- A pre-construction survey should be conducted for northwestern pond turtle by a qualified biologist within seven days before construction and again 24 hours before the commencement of construction. If nesting sites for pond turtles are identified within the survey limits, a buffer area of 300 feet should be established between the nesting site and the aquatic habitat (e.g., pond) located near the nesting site. The buffer should be indicated by temporary fencing if construction has or will begin before the nesting period has ended (the period from egg laying to emergence of hatchlings is normally April to November). If a non-nesting northwestern pond turtle is found in the Project site during pre-construction surveys, construction activities should not start within 300 feet of the animal until the turtle has been relocated by a qualified biologist with appropriate approvals from USFWS and CDFW to a suitable location outside of the construction zone. No northwestern pond turtle shall be relocated without prior approval from USFWS and CDFW.

- A qualified biological monitor(s) should be present during any dewatering or other work within suitable aquatic habitat that could harm turtles to relocate any northwestern pond turtles to suitable habitat outside of the work area. Before such work occurs, CDFW and USFWS will be

notified of the intent to conduct northwestern pond turtle monitoring and potential relocation. Any northwestern pond turtles observed during biological monitoring activities will be reported to the CNDDB.

6.2.2.5 Pallid Bat

If these bat species are roosting in the Study Area at the time of construction, construction activities and construction-related disturbance (e.g., noise, vibration, increased human activity) could adversely affect pallid bat, by direct harm, loss of roost tree(s), or by causing individuals to leave the roost under suboptimal conditions and exposing them to stress or increased chance of predation, which would be a potentially significant impact. To avoid potential impacts to these species, the following measures are recommended:

A qualified wildlife biologist should conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine if bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (e.g., Anabat, etc.). The type of survey will depend on the condition of the potential roosting habitat. If no bat roosts are found, then no further study is required.

- If evidence of bat use is observed, then the number and species of bats using the roost will be determined. Bat detectors may be used to supplement survey efforts.

- If roosts are determined to be present and have the likelihood to be disturbed by construction, then a qualified biologist will determine if the bats should be excluded from the roosting site before work adjacent to the roost occurs. A mitigation program addressing compensation, exclusion methods, and roost removal procedures will be developed prior to implementation if exclusion is recommended. Exclusion methods may include use of one-way doors at roost entrances (bats may leave, but not reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

6.2.2.6 Nesting Migratory Birds and Raptors, including Special-status Species

The following measures are recommended to avoid or minimize impacts to nesting birds. If Project activities commence during the avian breeding season (February 1 through August 31), a qualified biologist should conduct a pre-construction nesting bird survey no more than 7 days prior to initiation of Project activities. The survey area should include suitable raptor nesting habitat within 500 feet of the Project boundary (inaccessible areas outside of the Study Area can be surveyed from the site or from public roads using binoculars or spotting scopes). Pre-construction surveys are not required in areas where Project activities have been continuous since prior to February 1, as determined by a qualified biologist. Areas that have been inactive for more than 14 days during the avian breeding season must be re-surveyed prior to resumption of Project activities. If no active nests are identified, no further measures are required. If active nests are identified, the following measure should be implemented:

- A species-specific buffer should be established by a qualified biologist around active nests and no construction activities within the buffer should be allowed until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer

reliant on the nest, or the nest has failed). Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer should be monitored by a qualified biologist to determine whether nesting birds are being impacted.

6.2.3 Wetlands or other Potential Jurisdictional Waters of the U.S. and State

The perennial marsh (17.30 acres), seasonal marsh (1.78 acres), perennial drainages (8.83 acres), intermittent drainages (1.16 acres) and wetlands within the vernal pool system grassland complex (130.72 acres) within the Study Area are likely to be considered regulated aquatic resources subject to USACE and/or RWQCB jurisdiction under Sections 404 and 401 of the CWA as well as CDFW jurisdiction under Section 1600 of the Fish and Game Code. Valley foothill riparian habitat (14.88 acres) along the drainages may also fall under CDFW jurisdiction under Section 1600 of the Fish and Game Code. If any impacts to the aquatic resources or associated riparian canopy over the drainages are expected, then a formal aquatic resources delineation should be submitted to the appropriate resource agencies to determine the extent of jurisdiction. If any aquatic resources are determined to be jurisdictional, the project proponent will be required to apply for the required permits with the U.S. Army Corps of Engineers and/or Regional Water Quality Control Board to fill aquatic resources and any mitigation measures contained in the permits will require implementation prior to filling any on-site features deemed subject to regulation. Impacts to riparian and stream habitats will likely also require a Lake and Streambed Alteration Agreement from CDFW.

If aquatic habitats are anticipated to be avoided during the implementation of project activities, then boundaries of these habitats should be clearly marked and avoided during construction. Highly visible material, such as orange construction fencing should be constructed at least 50 feet from the boundary of these habitats to establish an appropriate no-disturbance buffer. Erosion control measures should also be implemented around these habitats and all other measures outlined in the Project's Storm Water Pollution Prevention Plan (SWPPP) and other general construction permits should be followed.

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2023b. Species status assessment report for the northwestern pond turtle (*Actinemys marmorata*) and southwestern pond turtle (*Actinemys pallida*), Version 1.1, April 2023. U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office, Ventura, California.

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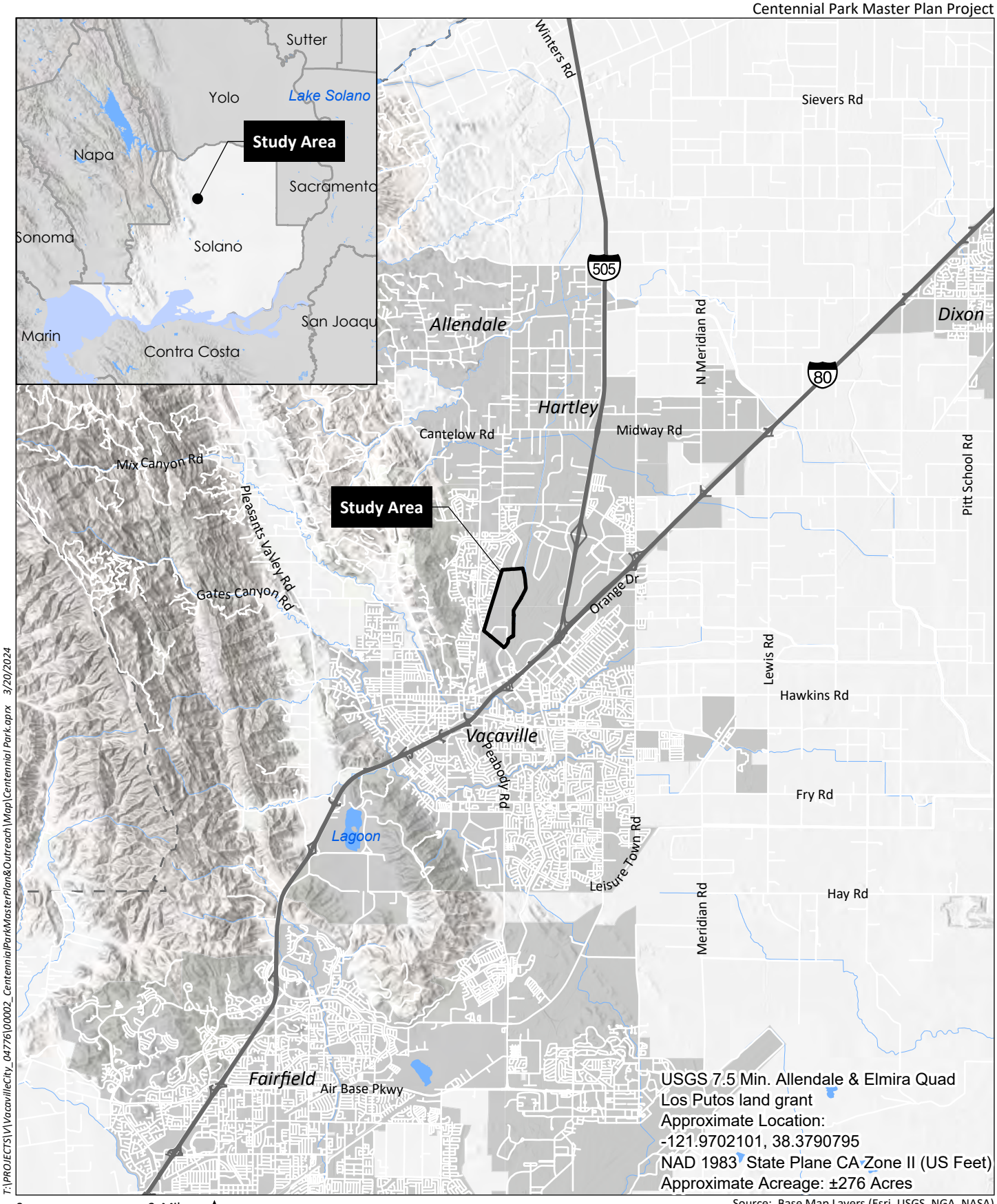
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Appendix A

Figures

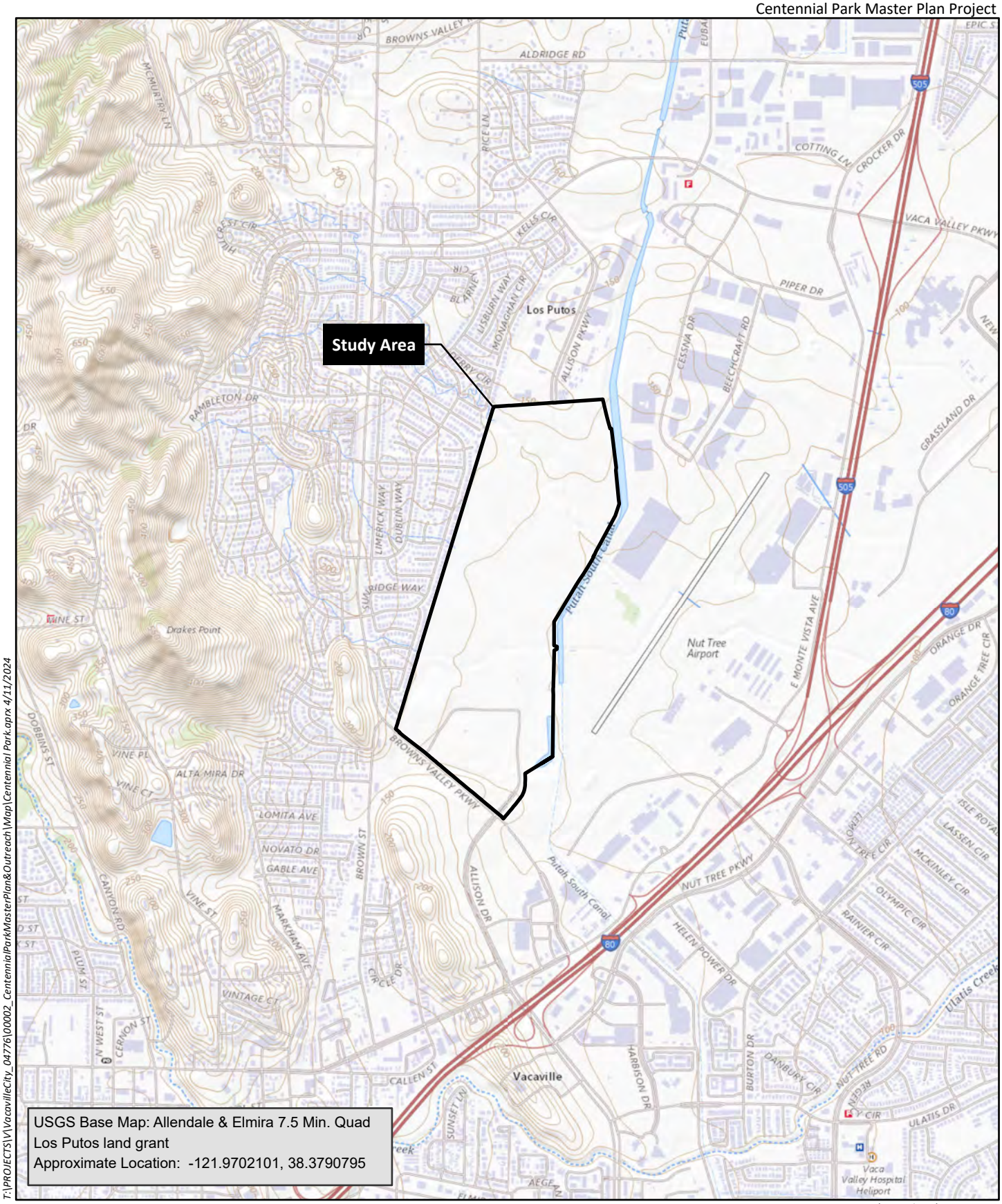


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HELIX Environmental Planning

Site and Vicinity Map

Figure 1



T:\PROJECTS\V1\VacavilleCity_04776\00002_CentennialParkMasterPlan&Outreach\Map\Centennial Park.aprx 4/11/2024

0 2,000 Feet

Source: USGS, The National Map, 2021

HELIX Environmental Planning

USGS Topographic Map

Figure 2

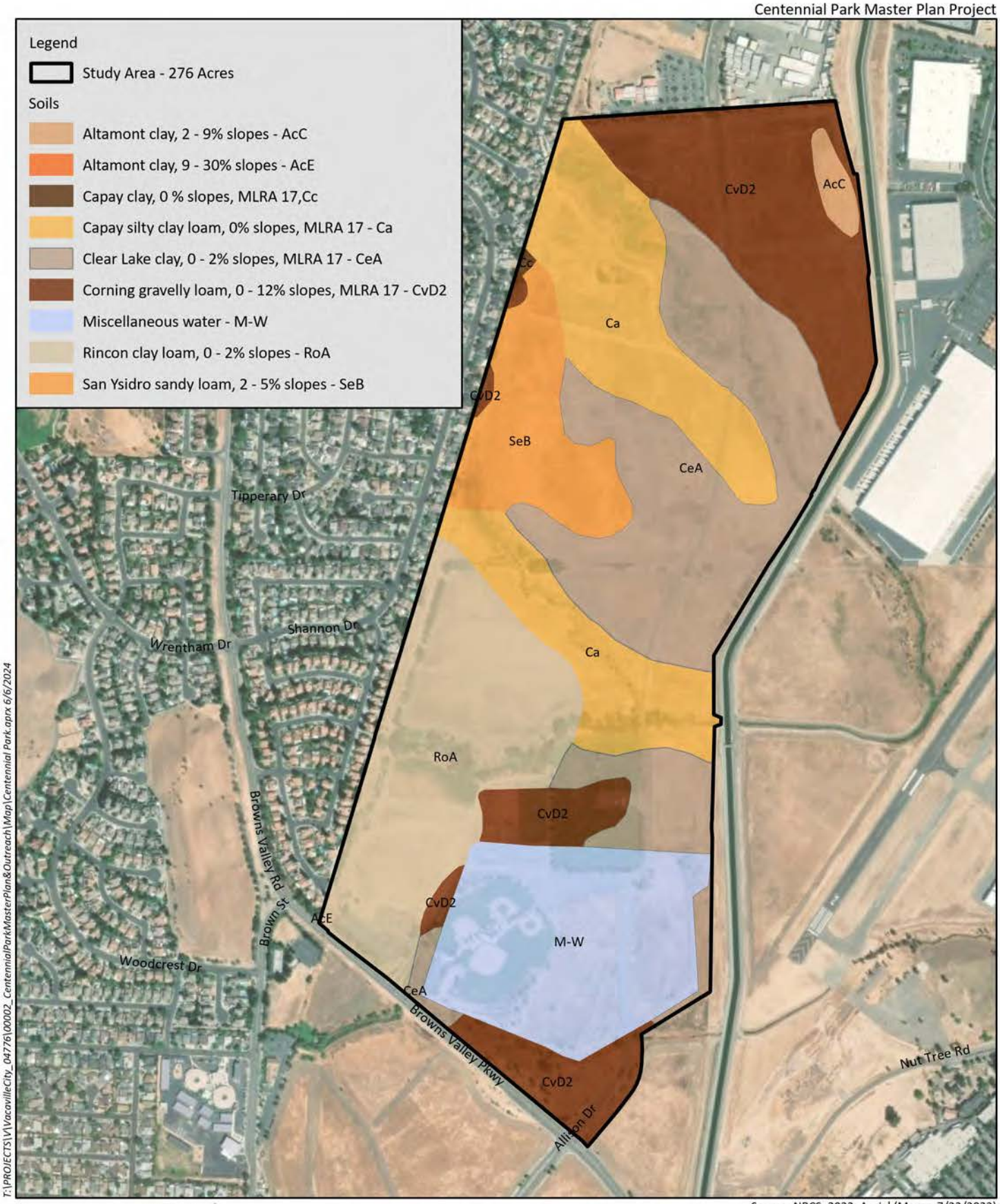


Source: Aerial (Maxar, 7/23/2022)

HELIX Environmental Planning

Aerial Map

Figure 3

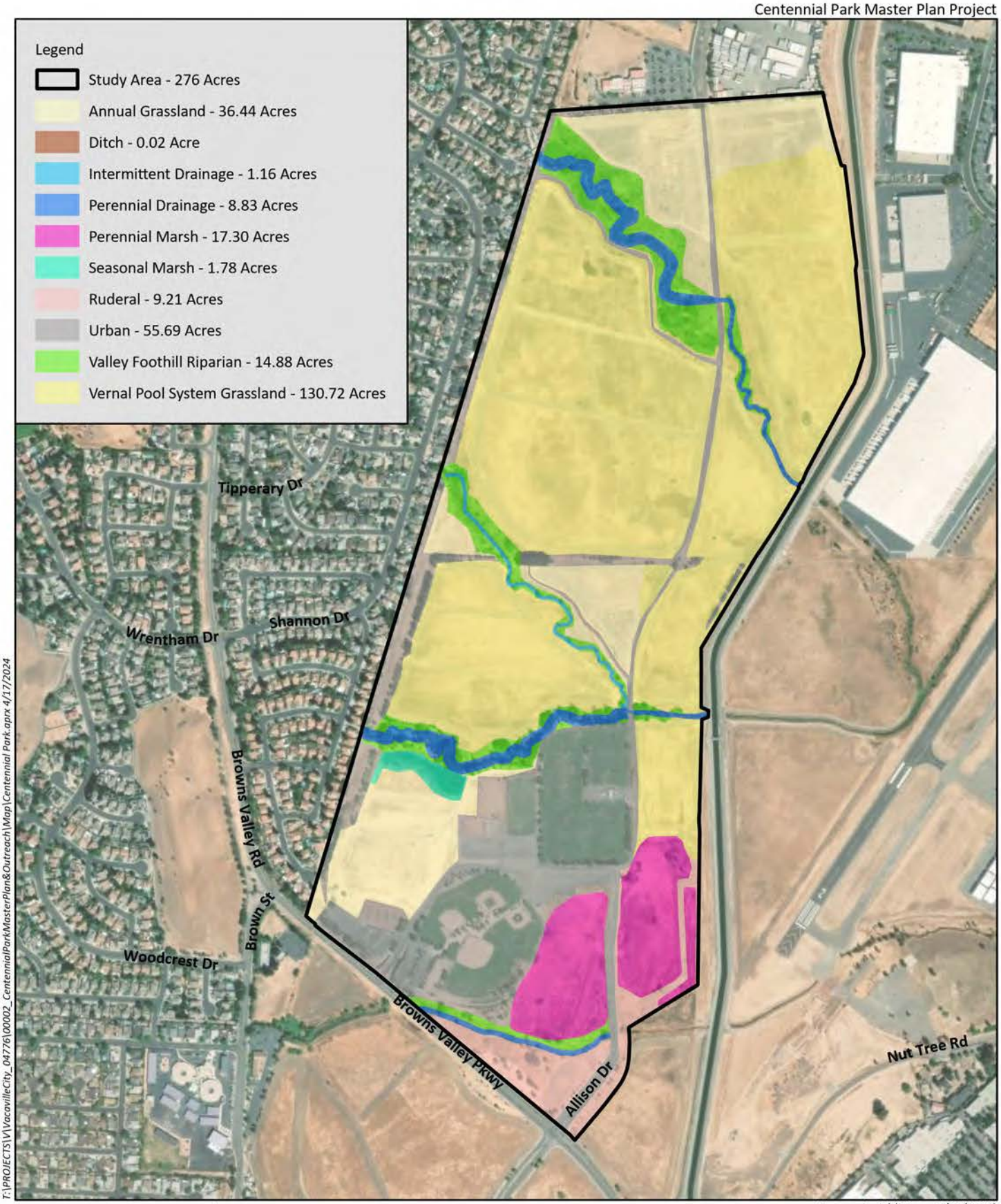


Source: NRCS, 2022; Aerial (Maxar, 7/23/2022)

HELIX Environmental Planning

Soils Map

Figure 4



T:\PROJECTS\V1\VacavilleCity_04776\00002_CentennialParkMasterPlan&Outreach\Map\Centennial Park.aprx 4/17/2024

0 800 Feet

Source: Aerial (Maxar, 7/23/2022)

HELIX Environmental Planning

Biological Communities

Figure 5

Appendix B

CNDDB, CNPS, and USFWS Lists of Regionally Occurring Special-Status Species

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 05/31/2024 23:42:05 UTC
Project Code: 2024-0029915
Project Name: Centennial Park Master Plan Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2024-0029915
Project Name: Centennial Park Master Plan Project
Project Type: Recreation - Maintenance / Modification
Project Description: Complete master plan.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.37821765,-121.97080938079725,14z



Counties: Solano County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 13 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
California Ridgway"s Rail *Rallus obsoletus obsoletus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4240	Endangered

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot *Spea hammondii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp *Branchinecta conservatio* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi*	Endangered

NAME STATUS

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2246

FLOWERING PLANTS

NAME STATUS

Contra Costa Goldfields *Lasthenia conjugens* Endangered
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/7058

Lassics Lupine *Lupinus constancei* Endangered
Population:
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/7976

San Joaquin Valley Orcutt Grass *Orcuttia inaequalis* Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/5506

Showy Indian Clover *Trifolium amoenum* Endangered
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/6459

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency:	HELIX Environmental Planning, Inc.
Name:	Patrick Martin
Address:	1180 Iron Point Road
Address Line 2:	Suite 130
City:	Folsom
State:	CA
Zip:	95630
Email	patrickm@helixepi.com
Phone:	9164351205

Selected Elements by Element Code

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Dixon (3812147) OR Winters (3812158) OR Merritt (3812157) OR Monticello Dam (3812251) OR Dozier (3812137) OR Mt. Vaca (3812241) OR Fairfield North (3812231) OR Elmira (3812138) OR Allendale (3812148))

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAAAA01181	***Ambystoma californiense pop. 1*** California tiger salamander - central California DPS	Threatened	Threatened	G2G3T3	S3	WL
AAABF02020	***Spea hammondii*** western spadefoot	Proposed Threatened	None	G2G3	S3S4	SSC
AAABH01051	***Rana boylii pop. 1*** foothill yellow-legged frog - north coast DPS	None	None	G3T4	S4	SSC
ABNGA04040	***Ardea alba*** great egret	None	None	G5	S4	
ABNGA06030	***Egretta thula*** snowy egret	None	None	G5	S4	
ABNGA11010	***Nycticorax nycticorax*** black-crowned night heron	None	None	G5	S4	
ABNKC06010	***Elanus leucurus*** white-tailed kite	None	None	G5	S3S4	FP
ABNKC10010	***Haliaeetus leucocephalus*** bald eagle	Delisted	Endangered	G5	S3	FP
ABNKC11011	***Circus hudsonius*** northern harrier	None	None	G5	S3	SSC
ABNKC19070	***Buteo swainsoni*** Swainson's hawk	None	Threatened	G5	S4	
ABNKD06071	***Falco peregrinus anatum*** American peregrine falcon	Delisted	Delisted	G4T4	S3S4	
ABNME03041	***Laterallus jamaicensis coturniculus*** California black rail	None	Threatened	G3T1	S2	FP
ABNNB03100	***Charadrius montanus*** mountain plover	None	None	G3	S2	SSC
ABNRB02022	***Coccyzus americanus occidentalis*** western yellow-billed cuckoo	Threatened	Endangered	G5T2T3	S1	
ABNSB10010	***Athene cunicularia*** burrowing owl	None	None	G4	S2	SSC
ABPBX24010	***Icteria virens*** yellow-breasted chat	None	None	G5	S4	SSC
ABPBXA0020	***Ammodramus savannarum*** grasshopper sparrow	None	None	G5	S3	SSC
ABPBXB0020	***Agelaius tricolor*** tricolored blackbird	None	Threatened	G1G2	S2	SSC
AFCAA01031	***Acipenser medirostris pop. 1*** green sturgeon - southern DPS	Threatened	None	G2T1	S1	SSC

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AFCHB03010	***Spirinchus thaleichthys*** longfin smelt	Proposed Endangered	Threatened	G5	S1	
AMABA01103	***Sorex ornatus sinuosus*** Suisun shrew	None	None	G5T1T2Q	S1S2	SSC
AMACC01020	***Myotis yumanensis*** Yuma myotis	None	None	G5	S4	
AMACC02010	***Lasionycteris noctivagans*** silver-haired bat	None	None	G3G4	S3S4	
AMACC05032	***Lasiurus cinereus*** hoary bat	None	None	G3G4	S4	
AMACC05080	***Lasiurus frantzii*** western red bat	None	None	G4	S3	SSC
AMACC08010	***Corynorhinus townsendii*** Townsend's big-eared bat	None	None	G4	S2	SSC
AMACC10010	***Antrozous pallidus*** pallid bat	None	None	G4	S3	SSC
AMAJF04010	***Taxidea taxus*** American badger	None	None	G5	S3	SSC
ARAAD02030	***Emys marmorata*** western pond turtle	Proposed Threatened	None	G3G4	S3	SSC
ARADB36150	***Thamnophis gigas*** giant gartersnake	Threatened	Threatened	G2	S2	
CTT42110CA	***Valley Needlegrass Grassland*** Valley Needlegrass Grassland	None	None	G3	S3.1	
CTT44120CA	***Northern Claypan Vernal Pool*** Northern Claypan Vernal Pool	None	None	G1	S1.1	
CTT52410CA	***Coastal and Valley Freshwater Marsh*** Coastal and Valley Freshwater Marsh	None	None	G3	S2.1	
ICBRA03010	***Branchinecta conservatio*** Conservancy fairy shrimp	Endangered	None	G2	S2	
ICBRA03030	***Branchinecta lynchi*** vernal pool fairy shrimp	Threatened	None	G3	S3	
ICBRA03150	***Branchinecta mesovallensis*** midvalley fairy shrimp	None	None	G2	S2S3	
ICBRA06010	***Linderiella occidentalis*** California linderiella	None	None	G2G3	S2S3	
ICBRA10010	***Lepidurus packardi*** vernal pool tadpole shrimp	Endangered	None	G3	S3	
IICOL02106	***Cicindela hirticollis abrupta*** Sacramento Valley tiger beetle	None	None	G5TH	SH	
IICOL36010	***Elaphrus viridis*** Delta green ground beetle	Threatened	None	G1	S1	

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
IICOL48011	***Desmocerus californicus dimorphus*** valley elderberry longhorn beetle	Threatened	None	G3T3	S3	
IICOL5V010	***Hydrochara rickseckeri*** Ricksecker's water scavenger beetle	None	None	G2?	S2?	
IIHEM07010	***Saldula usingeri*** Wilbur Springs shorebug	None	None	G2	S2	
IIHYM15010	***Myrmosula pacifica*** Antioch multilid wasp	None	None	GH	SH	
IIHYM24252	***Bombus occidentalis*** western bumble bee	None	Candidate Endangered	G3	S1	
IIHYM24260	***Bombus pensylvanicus*** American bumble bee	None	None	G3G4	S2	
IIHYM24380	***Bombus caliginosus*** obscure bumble bee	None	None	G2G3	S1S2	
IIHYM24480	***Bombus crotchii*** Crotch's bumble bee	None	Candidate Endangered	G2	S2	
IIHYM35030	***Andrena blennospermatis*** Blennosperma vernal pool andrenid bee	None	None	G2	S1	
IILEPP2012	***Danaus plexippus plexippus pop. 1*** monarch - California overwintering population	Candidate	None	G4T1T2Q	S2	
IMBIV19010	***Gonidea angulata*** western ridged mussel	None	None	G3	S2	
PDAPI0M051	***Cicuta maculata var. bolanderi*** Bolander's water-hemlock	None	None	G5T4T5	S2?	2B.1
PDAPI19030	***Lilaeopsis masonii*** Mason's lilaeopsis	None	Rare	G2	S2	1B.1
PDAST4R0P2	***Centromadia parryi ssp. parryi*** pappose tarplant	None	None	G3T2	S2	1B.2
PDAST57050	***Isocoma arguta*** Carquinez goldenbush	None	None	G1	S1	1B.1
PDAST5L030	***Lasthenia chrysantha*** alkali-sink goldfields	None	None	G2	S2	1B.1
PDAST5L040	***Lasthenia conjugens*** Contra Costa goldfields	Endangered	None	G1	S1	1B.1
PDAST5L0A1	***Lasthenia glabrata ssp. coulteri*** Coulter's goldfields	None	None	G4T2	S2	1B.1
PDAST5N0F0	***Layia septentrionalis*** Colusa layia	None	None	G2	S2	1B.2
PDASTE8470	***Symphyotrichum lentum*** Suisun Marsh aster	None	None	G2	S2	1B.2
PDBOR0V0H0	***Plagiobothrys hystriculus*** bearded popcornflower	None	None	G2	S2	1B.1

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDBRA1M0K1	***Lepidium latipes var. heckardii*** Heckard's pepper-grass	None	None	G4T1	S1	1B.2
PDCAM060C0	***Downingia pusilla*** dwarf downingia	None	None	GU	S2	2B.2
PDCAM0C010	***Legenere limosa*** legenere	None	None	G2	S2	1B.1
PDCHE040B0	***Atriplex cordulata var. cordulata*** heartscale	None	None	G3T2	S2	1B.2
PDCHE041F3	***Extriplex joaquinana*** San Joaquin spearscale	None	None	G2	S2	1B.2
PDCHE042L0	***Atriplex depressa*** brittlescale	None	None	G2	S2	1B.2
PDCHE042P0	***Atriplex persistens*** vernal pool smallscale	None	None	G2	S2	1B.2
PDCPR07080	***Viburnum ellipticum*** oval-leaved viburnum	None	None	G4G5	S3	2B.3
PDFAB0F8R1	***Astragalus tener var. tener*** alkali milk-vetch	None	None	G2T1	S1	1B.2
PDFAB0F8R3	***Astragalus tener var. ferrisiae*** Ferris' milk-vetch	None	None	G2T1	S1	1B.1
PDFAB250D2	***Lathyrus jepsonii var. jepsonii*** Delta tule pea	None	None	G5T2	S2	1B.2
PDFAB40040	***Trifolium amoenum*** two-fork clover	Endangered	None	G1	S1	1B.1
PDFAB400R5	***Trifolium hydrophilum*** saline clover	None	None	G2	S2	1B.2
PDLIN01030	***Hesperolinon breweri*** Brewer's western flax	None	None	G2	S2	1B.2
PDMAL0H0R3	***Hibiscus lasiocarpos var. occidentalis*** woolly rose-mallow	None	None	G5T3	S3	1B.2
PDMAL110D0	***Sidalcea keckii*** Keck's checkerbloom	Endangered	None	G2	S2	1B.1
PDPLM09140	***Leptosiphon jepsonii*** Jepson's leptosiphon	None	None	G2G3	S2S3	1B.2
PDPLM0C0E1	***Navarretia leucocephala ssp. bakeri*** Baker's navarretia	None	None	G4T2	S2	1B.1
PDRAN0B1J0	***Delphinium recurvatum*** recurved larkspur	None	None	G2?	S2	1B.2
PDSCR0J0D1	***Chloropyron molle ssp. hispidum*** hispid salty bird's-beak	None	None	G2T1	S1	1B.1
PDSCR0R060	***Gratiola heterosepala*** Boggs Lake hedge-hyssop	None	Endangered	G2	S2	1B.2

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDSCR10030	***Limosella australis*** Delta mudwort	None	None	G4G5	S2	2B.1
PMLIL0V0C0	***Fritillaria liliacea*** fragrant fritillary	None	None	G2	S2	1B.2
PMLIL0V0F0	***Fritillaria pluriflora*** adobe-lily	None	None	G2G3	S2S3	1B.2
PMPOA4C010	***Neostapfia colusana*** Colusa grass	Threatened	Endangered	G1	S1	1B.1
PMPOA4G060	***Orcuttia inaequalis*** San Joaquin Valley Orcutt grass	Threatened	Endangered	G1	S1	1B.1
PMPOA53110	***Puccinellia simplex*** California alkali grass	None	None	G2	S2	1B.2
PMPOA6N020	***Tuctoria mucronata*** Crampton's tuctoria or Solano grass	Endangered	Endangered	G1	S1	1B.1
PMPOT03091	***Stuckenia filiformis ssp. alpina*** northern slender pondweed	None	None	G5T5	S2S3	2B.2

Record Count: 90

CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

Search Results

43 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [1A:1B:2A:2B:3] , 9-Quad include [3812147:3812158:3812157:3812251:3812137:3812241:3812231:3812138:3812148]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Arctostaphylos manzanita ssp. *laevigata*	Contra Costa manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar(Apr)	None	None	G5T2	S2	1B.2	Yes	1984-01-01	 © 2019 Susan McDougall
Astragalus tener var. *ferrisiae*	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	None	None	G2T1	S1	1B.1	Yes	1994-01-01	No Photo Available
Astragalus tener var. *tener*	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G2T1	S1	1B.2	Yes	1994-01-01	No Photo Available
Atriplex cordulata var. *cordulata*	heartscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G3T2	S2	1B.2	Yes	1988-01-01	 © 1994 Robert E. Preston, Ph.D.
Atriplex depressa	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2009 Zoya Akulova
Atriplex persistens	vernal pool smallscale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G2	S2	1B.2	Yes	2001-01-01	No Photo Available
Centromadia parryi ssp. *parryi*	pappose tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.2	Yes	2004-01-01	 © 2016 John Doyen
Chloropyron molle ssp. *hispidum*	hispid salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	None	None	G2T1	S1	1B.1	Yes	1974-01-01	No Photo Available

Cicuta maculata var. *bolanderi*	Bolander's water-hemlock	Apiaceae	perennial herb	Jul-Sep	None	None	G5T4T5	S2?	2B.1		1974-01-01	 © 2007 Doreen L Smith
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2	1B.2	Yes	1988-01-01	No Photo Available
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2		1980-01-01	 © 2013 Aaron Arthur
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1988-01-01	No Photo Available
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2004 Carol W. Witham
Fritillaria pluriflora	adobe-lily	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	G2G3	S2S3	1B.2	Yes	1974-01-01	 © 2015 Steve Matson
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2		1974-01-01	 ©2004 Carol W. Witham
Hesperolinon breweri	Brewer's western flax	Linaceae	annual herb	May-Jul	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2014 Neal Kramer
Hibiscus lasiocarpos var. *occidentalis*	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	G5T3	S3	1B.2	Yes	1974-01-01	 © 2020 Steven Perry
Isocoma arguta	Carquinez goldenbush	Asteraceae	perennial shrub	Aug-Dec	None	None	G1	S1	1B.1	Yes	1994-01-01	No Photo Available
Lasthenia chrysantha	alkali-sink goldfields	Asteraceae	annual herb	Feb-Apr	None	None	G2	S2	1B.1	Yes	2019-09-30	 © 2009 California State University, Stanislaus

Lasthenia conjugens	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	FE	None	G1	S1	1B.1	Yes	1974-01-01	 © 2013 Neal Kramer
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	 © 2013 Keir Morse
Lathyrus jepsonii var. *jepsonii*	Delta tule pea	Fabaceae	perennial herb	May-Jul(Aug-Sep)	None	None	G5T2	S2	1B.2	Yes	1974-01-01	 © 2003 Mark Fogiel
Layia septentrionalis	Colusa layia	Asteraceae	annual herb	Apr-May	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2013 Jake Ruygt
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	Yes	1974-01-01	 ©2000 John Game
Lepidium latipes var. *heckardii*	Heckard's pepper-grass	Brassicaceae	annual herb	Mar-May	None	None	G4T1	S1	1B.2	Yes	1994-01-01	 2018 Jennifer Buck
Leptosiphon jepsonii	Jepson's leptosiphon	Polemoniaceae	annual herb	Mar-May	None	None	G2G3	S2S3	1B.2	Yes	2001-01-01	 © 2012 Aaron Arthur
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	None	CR	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Limosella australis	Delta mudwort	Scrophulariaceae	perennial stoloniferous herb	May-Aug	None	None	G4G5	S2	2B.1		1994-01-01	 © 2020 Richard Sage
Malacothamnus helleri	Heller's bushmallow	Malvaceae	perennial deciduous shrub	May-Jul	None	None	G2Q	S2	3.3	Yes	1974-01-01	 © 2017 Keir Morse

Myosurus minimus ssp. *apus*	little mousetail	Ranunculaceae	annual herb	Mar-Jun	None	None	G5T2Q	S2	3.1		1980-01-01	No Photo Available
Navarretia leucocephala ssp. *bakeri*	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G4T2	S2	1B.1	Yes	1994-01-01	 © 2018 Barry Rice
Neostapfia colusana	Colusa grass	Poaceae	annual herb	May-Aug	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Plagiobothrys hystriculus	bearded popcornflower	Boraginaceae	annual herb	Apr-May	None	None	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	None	None	G2	S2	1B.2		2015-10-15	 © 2017 Chris Winchell
Sidalcea keckii	Keck's checkerbloom	Malvaceae	annual herb	Apr-May(Jun)	FE	None	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Spergularia macrotheca var. *longistyla*	long-styled sand-spurrey	Caryophyllaceae	perennial herb	Feb-May	None	None	G5T2	S2	1B.2	Yes	2017-06-16	No Photo Available
Stuckenia filiformis ssp. *alpina*	northern slender pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	None	None	G5T5	S2S3	2B.2		1994-01-01	 Dana York (2016)
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	FE	None	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	Yes	2001-01-01	 © 2005 Dean Wm Taylor
Tuctoria mucronata	Crampton's tuctoria or Solano grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Viburnum ellipticum	oval-leaved viburnum	Viburnaceae	perennial deciduous shrub	May-Jun	None	None	G4G5	S3	2B.3		1974-01-01	 © 2006 Tom Engstrom

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Appendix C

Potential for Special-Status Species in the Region to Occur in the Study Area

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Plants			
Arctostaphylos manzanita ssp. *laevigata* Contra Costa manzanita	--/--/1B.2	An annual herb found in vernally mesic meadows and seeps, and subalkaline flats in valley and foothill grassland, from 2 – 75 meters elevation. Previously thought extinct and rediscovered in 1989; currently known from 13 locations in the Sacramento Valley. Blooms April – May (CNPS 2024).	**Will not occur.** The Study Area is outside of this species' known range (CNPS 2024). There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Astragalus tener var. *ferrisiae* Ferris' milk-vetch	--/--/1B.1	An annual herb found in vernally mesic meadows and seeps, and subalkaline flats in valley and foothill grassland, from 2 – 75 meters elevation. Previously thought extinct and rediscovered in 1989; currently known from 13 locations in the Sacramento Valley. Blooms April – May (CNPS 2024).	**Will not occur.** The Study Area is outside of this species' known range (CNPS 2024). There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Astragalus tener var. *tener* alkali milkvetch	--/--/1B.2	An annual herb found in alkaline habitats in playas, valley and foothill grassland (adobe clay soils), and vernal pools from 1 – 60 meters above msl. Blooms March – June (CNPS 2024).	**Will not occur.** Suitable alkaline playa habitat is not present for this species in the Study Area. There are two CNDDB reported occurrences within a 5-mile radius of the Study Area, however both records are historic from the 1890s with one record considered extirpated (CDFW 2024). The nearest record is located approximately 4.6 miles south of the Study Area.
Atriplex cordulata var. *cordulata* heartscale	--/--/1B.2	An annual herb found on saline or alkaline soils in chenopod scrub, meadows, seeps, and sandy valley and foothill grasslands from 0 – 560 meters elevation. Blooms April – October (CNPS 2024).	**Will not occur.** Suitable saline wetland in sandy soils is not present for this species in the Study Area. Alkaline soils are weak to moderate and soil in the Study Area is primarily acidic (NRCS 2023). This species is known to occur in the Jepson Prairie south of the Study Area however, there are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Atriplex depressa brittlescale	--/--/1B.2	An annual herb found on alkaline, clay soils in chenopod scrub, meadows, seeps, playas, vernal pools, and valley and foothill grasslands from 1 – 320 meters elevation. Blooms April – October (CNPS 2024).	**May occur.** Suitable alkaline wetland is present for this species in the Study Area. Alkaline soils are weak to moderate and soil in the Study Area is primarily acidic (NRCS 2023). This species is known to occur in the Jepson Prairie south of the Study Area however, there are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Atriplex persistens vernal pool smallscale	--/--/1B.2	An annual herb found in alkaline vernal pools from 10 – 115 meters elevation. Blooms June – October (CNPS 2024).	**May occur.** Suitable vernal pool complexes are present for this species in the Study Area. This species is known to occur in the Jepson Prairie south of the Study Area however, there are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Centromadia parryi ssp. *parryi* pappose tarplant	--/--/1B.2	An annual herb found in chaparral, coastal prairie, meadows, seeps, coastal salt marshes, and vernally mesic valley and foothill grassland from 0 – 420 meters elevation, often in alkaline microsites. Blooms May – November (CNPS 2024).	**May occur.** Suitable wetland habitat in alkaline soil is present for this species in the Study Area. Alkaline soils are weak to moderate in the Study Area, however the Study Area is primarily acidic (NRCS 2023). There is only one CNDDB reported occurrence for this species within a 5-mile radius located 3.75 miles south of the Study Area (CDFW 2024). The record documents a mitigation bank with approximately 200 plants observed in 2013 (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Chloropyron molle ssp. *hispidum* hispid bird's-beak	--/--/1B.1	An annual hemiparasitic herb found in alkaline habitats in meadows, seeps, playas, and valley and foothill grassland from 1 – 155 meters elevation in the Central Valley. Blooms June – September (CNPS 2024).	**May occur.** Suitable wetland habitat in alkaline soil is present for this species in the Study Area. Alkaline soils are weak to moderate in the Study Area, however the Study Area is primarily acidic (NRCS 2023). There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Cicuta maculata var. *bolanderi* Bolander's water-hemlock	--/--/2B.1	A perennial herb found in coastal freshwater and brackish marshes from 0 – 200 meters elevation. Blooms July – September (CNPS 2024).	**Will not occur.** Suitable coastal or brackish marsh is not present for this species in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Delphinium recurvatum Recurved larkspur	--/--/1B.2	A perennial herb found in alkaline microsites in chenopod scrub, cismontane woodland, and valley and foothill grassland from 3 – 79 meters elevation. Blooms March – June (CNPS 2024).	**May occur.** Suitable cismontane woodland and valley and foothill grassland with alkaline soils are present in the Study Area. The nearest CNDDB reported occurrence is located on the southwestern edge of the Study Area. The record is dated from 1940 and documents this species and a nonspecific location in clay soil (CDFW 2024).
Downingia pusilla dwarf downingia	--/--/2B.2	An annual herb found in vernal pools and mesic microsites in valley and foothill grassland from 1 – 445 meters elevation. Blooms March – May (CNPS 2024).	**May occur.** Suitable wetland and valley and foothill grassland are present in the Study Area. The nearest CNDDB reported occurrence is located 1.3 miles northeast of the Study Area and documents an estimated 250,000 plants in 1998 (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Extriplex joaquinana San Joaquin spearscale	--/--/1B.2	An annual herb found in alkaline habitats in chenopod scrub, meadows and seeps, playas, and valley and foothill grassland from 1 – 835 meters elevation. Blooms April – October (CNPS 2024).	**May occur.** Suitable alkaline wetland is present for this species in the Study Area in vernal pool system grasslands. Alkaline soils are weak to moderate and soil in the Study Area is primarily acidic (NRCS 2023). There is only one extant CNDDB reported occurrence for this species within a 5-mile radius located 3.75 miles south of the Study Area (CDFW 2024). The record documents this species at Lagoon Valley Lake in 1989 (CDFW 2024).
Fritillaria liliacea fragrant fritillary	--/--/1B.2	A perennial bulbiferous herb is found usually on serpentine soils in cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland from 3 – 410 meters elevation. Blooms February – April (CNPS 2024).	**Will not occur.** Suitable serpentinite soil is not present for this species in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Fritillaria pluriflora adobe-lily	--/--/1B.2	A bulbiferous herb found in chaparral, cismontane woodland, and valley and foothill grassland from 45 – 945 meters elevation, often on adobe soils. Blooms February – April (CDFW 2024; CNPS 2024).	**May occur.** The Study Area is slightly below this species' elevational range, however historic and non-specific occurrences are mapped adjacent to the Study Area (CDFW 2024). There are no recent CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Gratiola heterosepala Boggs Lake hedge-hyssop	--/SE/1B.2	An annual herb found on clay soils in marshes and swamps at lake margins, and in vernal pools from 10 – 2,375 meters elevation. Blooms April – August (CNPS 2024).	**May occur.** Vernal pools may provide suitable habitat for this species in the Study Area, however lake margin habitat for this species is not present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Hesperolinon breweri Brewer's western flax	--/--/1B.2	An annual herb found usually on serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland from 195 – 910 meters elevation. Blooms May – July (CDFW 2024; CNPS 2024).	**Will not occur.** Suitable serpentinite soils are not present for this species in the Study Area. There are no recent CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Hibiscus lasiocarpos var. occidentalis woolly rose-mallow	--/--/1B.2	A perennial rhizomatous emergent herb found in freshwater marshes and swamps along wet banks in moist freshwater soaked riverbanks and low peat islands in sloughs from 0 – 120 meters elevation, often in riprap along levees and waterways. Blooms June – September (CNPS 2024; CDFW 2024).	**Will not occur.** Suitable freshwater marsh habitat in sloughs is not present for this species in the Study Area. This species is typically associated with the Sacramento River and adjacent tributaries and sloughs. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Isocoma arguta Carquinez goldenbush	--/--/1B.1	A perennial shrub found in alkaline microsites in valley and foothill grassland from 1 – 20 meters elevation. Blooms August – December (CNPS 2024).	**Will not occur.** The Study Area is above this species' elevational range. Additionally, this species is a perennial shrub and would have been identifiable in March of 2024. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Lasthenia chrysantha alkali-sink goldfields	--/--/1B.1	An annual herb found in vernal pools and wet saline flats from below 100 meters elevation. Blooms February – April (Jepson Flora Project 2024).	**Will not occur.** There is no suitable saline flat habitat. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Lasthenia conjugens Contra Costa goldfields	FE/--/1B.1	Annual herb found in mesic habitats within cismontane woodland, alkaline playas, valley and foothill grassland and vernal pools from an elevation of 0 to 470 meters. Blooms March to June (CNPS 2024).	**May occur.** Suitable wetland and valley and foothill grassland with alkaline soils are present in the Study Area. There are no extant CNDDB reported occurrences in the Study Area (CDFW 2024).
Lasthenia glabrata ssp. coulteri Coulter's goldfields	--/--/1B.1	An annual herb found in coastal salt marshes, playas, and vernal pools from 1 – 1,220 meters elevation. Blooms February – June (CNPS 2024).	**Will not occur.** Suitable salt marsh or alkaline flat wetland habitat is not present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Lathyrus jepsonii var. *jepsonii* Delta tule pea	--/--/1B.2	A perennial herb found in freshwater and brackish marshes from 0 – 5 meters elevation. Blooms May – July (September) (CNPS 2024).	**Will not occur.** The Study Area is above this species' elevational range. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Layia septentrionalis Colusa layia	--/--/1B.2	An annual herb found on sandy serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland from 100 – 1,095 meters elevation. Blooms April – May (CNPS 2024).	**Will not occur.** The Study Area is below this species' elevational range. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Legenere limosa legenere	--/--/1B.1	An annual herb found in vernal pools from 1 – 880 meters elevation. Blooms April – June (CNPS 2024).	**May occur.** Suitable wetland and valley and foothill grassland with alkaline soils are present in the Study Area. There are no extant CNDDB reported occurrences in the Study Area (CDFW 2024).
Lepidium latipes var. *heckardii* Heckard's peppergrass	--/--/1B.2	An annual herb found on alkaline flats in valley and foothill grasslands from 2 – 200 meters elevation. Blooms March – May (CNPS 2024).	**Will not occur.** Suitable alkaline flat wetland habitat is not present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Leptosiphon jepsonii Jepson's leptosiphon	--/--/1B.2	An annual herb usually found on volcanic soils in chaparral, cismontane woodlands, and valley and foothill grasslands from 100 – 500 meters elevation (CNPS 2023). Blooms March – May (CNPS 2024).	**Will not occur.** The Study Area is below this species' elevational range and volcanic soils are absent from the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Lilaeopsis masonii Mason's lilaeopsis	--/SR/1B.1	A perennial rhizomatous herb found in marshes, swamps, and riparian scrub from 0 – 10 meters elevation. Range is restricted to the Delta, Suisun Bay, and San Pablo Bay. Blooms April – November (CNPS 2024).	**Will not occur.** The Study Area is above this species' elevational range. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Limosella australis Delta mudwort	--/--/2B.1	A perennial stoloniferous herb found in freshwater or brackish marshes and riparian scrub from 0 – 3 meters elevation, usually on muddy banks. Native status in California is uncertain; may be naturalized from the Eastern U.S. Blooms May – August (CNPS 2024).	**Will not occur.** The Study Area is above this species' elevational range. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Lupinus constancei Lassics lupine	FE/SE/1B.1	An annual herb found on serpentinite soil in lower montane coniferous forest from 1,500 – 2,000 meters elevation. Blooms July (CNPS 2024).	**Will not occur.** Suitable habitat for this species is absent; the Study Area is outside of this species' known range and the Study Area is below this species' elevational range.
Myosurus minimus ssp. *apus* little mousetail	--/--/3.1	An annual herb found in alkaline vernal pools in valley and foothill grassland from 20 – 640 meters elevation. Blooms March – June (CNPS 2024).	**May occur.** Suitable wetland and valley and foothill grassland with alkaline soils are present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Navarretia leucocephala ssp. *bakeri* Baker's navarretia	--/--/1B.1	An annual herb found in mesic meadows and vernal pools in cismontane woodland, lower montane coniferous forest, and valley and foothill grassland from 5 – 1,740 meters elevation. Blooms April – July (CNPS 2024).	**May occur.** Suitable wetland and valley and foothill grassland with alkaline soils are present in the Study Area. There are several recent CNDDB reported occurrences for this species. The nearest record documents this species in vernal pools and swales in mitigation land located 1.8 miles north of the Study Area (CDFW 2024).
Neostapfia colusana Colusa grass	FT/SE/1B.1	An annual herb found in the bottoms of large, deep vernal pools, typically on adobe substrate, from 5 to 200 meters elevation. Blooms May – August (CNPS 2024).	**Will not occur.** Suitable large lake bottoms and deep vernal pools are not present in the Study Area for this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area, and this species is known to occur in the Jepson Prairie and further south of the Study Area in the Central Valley. (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Orcuttia inaequalis San Joaquin Valley Orcutt grass	FT/SE/1B.1	An annual herb found in vernal pools from 10 – 755 meters elevation. Blooms April – September (CNPS 2024).	**Not expected.** Although habitat is present for this species, this species is known to occur in the Jepson Prairie and further south of the Study Area in the Central Valley. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Plagiobothrys hystriculus bearded popcornflower	--/--/1B.1	An annual herb found in mesic valley and foothill grassland, and along the margins of vernal pools and vernal swales from 0 – 274 meters elevation. Blooms April – May (CNPS 2024).	**May occur.** Suitable wetland and valley and foothill grassland with alkaline soils are present in the Study Area. There are two recent CNDDB reported occurrences for this species that document this species in vernal pools and swales near the Study Area (CDFW 2024).
Puccinellia simplex California alkali grass	--/--/1B.2	An annual herb found in alkaline, vernally mesic sinks, flats, and lake margins in chenopod scrub, meadows, seeps, vernal pools, and valley and foothill grasslands from 2 – 930 meters elevation. Blooms March – May (CNPS 2024).	**May occur.** Suitable sinks, flats and lake margins are not present for this species in the Study Area, however vernal pools in annual grasslands are present and could provide habitat for this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Sidalcea keckii Keck's checker mallow	FE/--/1B.1	An annual herb found in cismontane woodland and valley and foothill grassland, often in serpentinite and clay soils, from 75 – 650 meters elevation. Blooms April – May (June) (CNPS 2024).	**Will not occur.** The Study Area is below this species' elevational range. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Spergularia macrotheca ssp. longistyla Long-styled sand-spurrey	--/--/1B.2	A perennial herb found on alkaline sites in marshes swamps, meadows and seeps from 0 – 255 meters elevation. Blooms February – May (CNPS 2024).	**Will not occur.** Suitable habitat is not present for this species in the Study Area. There are no CNDDB reported occurrences of this species within a 5-mile radius of the Study Area (CDFW 2024). In Solano County, this species is known from the margin of the San Francisco Bay (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Stuckenia filiformis ssp. *alpina* slender-leaved pondweed	--/--/2B.2	A perennial rhizomatous aquatic herb found in marshes, swamps, and other shallow freshwater habitats from 300 – 2,150 meters elevation. Blooms May – July (CNPS 2024).	**Will not occur.** The Study Area is below this species' elevational range. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Symphyotrichum lentum Suisun Marsh aster	--/--/1B.2	A perennial rhizomatous herb found in freshwater and brackish marsh from 0 – 3 meters elevation. Blooms May – November (CNPS 2024).	**Will not occur.** The Study Area is above this species' elevational range. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Trifolium amoenum two-fork clover	FE/--/1B.1	An annual herb found in wetlands in coastal bluff scrub and valley and foothill grassland from 5 – 415 meters elevation; sometimes on serpentine soils. Most records are historic; recent rediscoveries are uncertain. Blooms April – June (CNPS 2024).	**May occur.** Suitable wetland and valley and foothill grassland with alkaline soils are present for this species in the Study Area. There are no current CNDDB reported occurrences for this species other than historic accounts that are non-specific and over 100 years old (CDFW 2024).
Trifolium hydrophilum saline clover	--/--/1B.2	An annual herb found in marshes, swamps, mesic alkaline valley and foothill grassland, and vernal pools from 0–- 300 meters elevation. Blooms April – June (CNPS 2023).	**May occur.** Suitable wetland and valley and foothill grassland with alkaline soils are present in the Study Area. There are no current CNDDB reported occurrences for this species other than historic accounts that are non-specific east of the Nut Tree Airport (CDFW 2024).
Tuctoria mucronata Crampton's tuctoria or Solano grass	FE/SE/1B.1	An annual herb found on mesic soils in vernal pools, and valley and foothill grasslands from 5 – 10 meters elevation. Blooms April – August (CNPS 2023).	**Will not occur.** The Study Area is above this species' elevational range. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Viburnum ellipticum oval-leaved viburnum	--/--/2B.3	A perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 215 – 1,400 meters elevation. Blooms May – June (CNPS 2024).	**Will not occur.** The Study Area is below this species' elevational range and suitable habitat is absent for this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Animals			
Invertebrates			
Bombus crotchii Crotch's bumble bee	--/SCE/--/--	Crotch bumble bee occurs in grassland and scrub habitats (California Department of Fish and Wildlife [CDFW] 2019). New colonies are initiated by solitary queens, generally in the early spring, which typically occupy abandoned rodent burrows (CDFW 2019). This species is a generalist forager and have been reported visiting a wide variety of flowering plants. A short-tongued bumble bee; food plants include *Asclepias* spp., *Antirrhinum* spp., *Clarkia* spp., *Eschscholzia* spp., *Eriogonum* spp., *Chaenactis* spp., *Lupinus* spp., *Medicago* spp., *Phacelia* spp., and *Salvia* spp. (Koch et al. 2012). The flight period for queens in California is from February to October. New queens hibernate over the winter and initiate a new colony the following spring (CDFW 2019). Rare throughout its range and in decline in the Central Valley and southern California (CDFW 2019).	**May occur.** Suitable habitat is present in annual grassland. There is one CNDDB reported occurrence within a 5-mile radius of the Study Area (CDFW 2024). This record documents a collection of this species 3.1 miles southwest of the Study Area at Lagoon Valley Reservoir in 2007 (CDFW 2024).
Bombus occidentalis Western bumble bee	--/SCE/--	Bumble bees are primitively eusocial insects that live in underground colonies made up of one queen, female workers, and reproductive members of the colony. New colonies are initiated by solitary queens, generally in the early spring, which typically occupy abandoned rodent burrows (Thorp *et al.* 1983). This species occurs in meadows and grasslands with an abundance of floral resources (CDFW 2019). This species is a generalist forager and have been reported visiting a wide variety of flowering plants. A short-tongued	**Will not occur.** The Study Area is outside of this species' current range (CDFW 2023). There are no current CNDDB reported occurrences for this species within a 5-mile radius of the Study Area and CDFW considers this species to be extirpated from this region (CDFW 2023).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
		bumble bee; select food plants include *Melilotus* spp., *Cirsium* spp., *Trifolium* spp., *Centaurea* spp., *Eriogonum* spp., and *Chrysothamnus* spp. (Koch et al. 2012). This species has a short tongue and typically prefers open flowers with short corollas but is known to chew through the base of flowers with long corollas. The flight period for queens in California is from early February to late November, peaking in late June and late September. New queens hibernate over the winter and initiate a new colony the following spring (Thorp *et al.* 1983). Rare throughout its range and in decline west of the Sierra Nevada crest.	
Branchinecta conservatio Conservancy fairy shrimp	FE/--/--	Occupies large clay bottomed vernal pools to vernal lakes with turbid water in grasslands. The mean size of vernal pools is approximately seven acres. The historical distribution of this species is unknown, and it is currently distributed throughout the Central Valley and southern coastal regions of California (USFWS 2005).	**Will not occur.** Suitable large vernal pool or vernal lakes are not present in the Study Area. The current range of this species in the region of the Study Area is limited to the Jepson Prairie outside of the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Branchinecta lynchi vernal pool fairy shrimp	FT/--/--	Vernal pools ranging from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. It is most frequently found in pools measuring less than 0.05 acre; although has been collected from vernal pools exceeding 25 acres. The known range within California includes the Central Valley and southern California (USFWS 2005).	**May occur.** Suitable wetland habitat is present in the Study Area. Wetland habitat occurs along berms and in wetland complexes. There are eight CNDDB reported occurrences within a 5-mile radius of the Study Area with the nearest record occurring 0.7 mile east of the Study Area (CDFW 2024). The CNDDB record documents a small population in a vernal pool on private property (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Danaus plexippus pop. 1 monarch - California overwintering population	FCE/--/--	The federal listing on December 17, 2020 was for overwintering populations of Monarch butterflies that roost in wind protected tree groves, especially with *Eucalyptus* sp., and species of pine or cypress with nectar and water sources nearby. Winter roost sites extend along the coast from Mendocino County to Baja California. As caterpillars, monarchs feed exclusively on the leaves of milkweed (*Asclepias* sp.) (Nial et al. 2019 and USFWS 2020). Monarch butterfly migration routes pass east over the Sierra Nevada in the fall and back to the California coast in the spring (USFWS 2020). The overwintering population is located along the Coast while summer breeding areas occur in interior California and North America with spring breeding areas located further east (USFWS 2020).	**Not expected.** Suitable overwintering habitat is not present in the Study Area. This species could occur migrating through the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Desmocerus californicus dimorphus valley elderberry longhorn beetle	FT/--/--	Endemic to elderberry shrubs (*Sambucus* spp.) occurring in riparian habitat in the Sacramento and San Joaquin Valleys and less common throughout riparian forests of the Central Valley from Redding to Fresno County (USFWS 2014) typically below 152 m amsl (USFWS 2017a).	**May occur.** Suitable elderberry shrub habitat that could provide habitat for valley elderberry longhorn beetle was not detected in the Study Area in March 2024, however focused surveys for elderberry shrubs were not conducted. Suitable riparian habitat is present in the Study Area. Additionally, the riparian habitat in the Study Area is not contiguous with other occupied riparian habitat with documented occurrences of valley elderberry longhorn beetle. There is one CNDDB reported occurrence within a 5-mile radius of the Study Area located 2 miles west of the Study Area along Alamo Creek. The record

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
			documents occupied riparian habitat along Alamo Creek in 2008 (CDFW 2024).
Elaphrus viridis Delta green ground beetle	FT/--/--	Margins of large playa lakes in the Jepson Prairie region of eastern Solano County – associated with areas of low-growing, sparse vernal pool plant species (USFWS 2005).	**Will not occur.** The Study Area is outside of the known range of this species, which is limited to the Jepson Prairie (USFWS 2005).
Lepidurus packardi vernal pool tadpole shrimp	FE/--/--	Vernal pools from 54 square feet to 89 acres, containing clear- to highly-turbid water. Its known range is within the Central Valley of California and in the San Francisco Bay area (USFWS 2005).	**May occur.** Suitable wetland habitat is present in the Study Area. Wetland habitat occurs along berms and in wetland complexes. There are eight CNDDB reported occurrences within a 5-mile radius of the Study Area with the nearest record occurring 0.6 mile south of the Study Area (CDFW 2024). The CNDDB record from 1995 documents one egg and no shrimp and suggests this vernal pool was destroyed for a highway project (CDFW 2024).
Fishes			
Acipenser medirostris green sturgeon southern DPS	FT/--/--	Spawn in freshwater streams, in fast, deep water, over gravel, cobble, or boulders. Juveniles inhabit estuarine waters for 1-4 years until dispersing into coastal marine waters as adults. Adults return to spawn in fresh water every 6-10 years. Sacramento River watershed, including the Feather River, is the only known historical and present spawning areas for green sturgeon (NMFS 2018).	**Will not occur.** Aquatic habitat for this species is not present in the Study Area.

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Spirinchus thaleichthys Longfin smelt	FC/ST/--	The longfin smelt is a pelagic estuarine fish that spawns in freshwater and then moves downstream to brackish water to rear. They usually live for 2 years, spawn, and then die, although some individuals may spawn as 1- or 3-year-old fish before dying. Longfin smelt in the Bay-Delta may spawn as early as November and as late as June, although spawning typically occurs from January to April. The specific spawning substrate remains unknown (USFWS 2022). The known range of the longfin smelt extends from the San Francisco Bay-Delta in California northward to Alaska. Longfin smelt have been observed in their winter and spring spawning period as far upstream as Colusa State Park in the Sacramento River, the City of Lathrop in the San Joaquin River system, Hog Slough off the South-Fork Mokelumne River, and in the South Delta near Old River south of Indian Slough (USFWS 2022).	**Will not occur.** Aquatic habitat for this species is not present in the Study Area.
Amphibians			
Ambystoma californiense California tiger salamander	FT/ST/--	California tiger salamanders are generally restricted to vernal pools and seasonal ponds, including many constructed stock ponds, in grassland and oak savannah plant communities from sea level to about 1,500 feet in central California. This species spends the majority of its life in upland areas in the vicinity of suitable breeding ponds, where it inhabits rodent burrows. In order to provide suitable habitat for this species, suitable breeding habitat must be present in combination with suitable upland habitat. In the Coastal region,	**May occur.** Suitable habitat is present in the Study Area for this species, and habitat is mapped as suitable by the Solano Habitat Conservation Plan (Vacaville 2015). Wetland habitat in the Study Area that could support larval development of this species is present in vernal pools in vernal pool system grassland habitat with upland dispersal and refuge habitat present in annual grassland habitat. However, the Study Area is fragmented and surrounded entirely by urban development which

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
		populations are scattered from Sonoma County in the northern San Francisco Bay Area to Santa Barbara County, and in the Central Valley and Sierra Nevada foothills from Yolo to Kern counties (USFWS 2017b).	significantly reduces the suitability of habitat for this species (USFWS 2017b). Nearby CNDDB records for this species are in the Jepson Prairie, south of Interstate 80 and approximately 10 miles from the Study Area (CDFW 2024). Interstate 80 and urban development provides a barrier for dispersal of this species from known populations and unknown populations (USFWS 2017b).
Rana boylii Foothill yellow-legged frog – north coast DPS	--/--/SSC	The foothill yellow-legged frog occurs along the coast ranges from Oregon to Los Angeles and along the western side of the Sierra Nevada. This species uses perennial rocky streams in a wide variety of habitats up to 6,400 feet above msl. This species rarely ventures far from water, is usually found basking in the water, or under surface debris or underground within 165 feet of water. Eggs are laid in clusters attached to gravel or rocks along stream margins in flowing water. Tadpoles typically require up to four months to complete aquatic development. Breeding typically follows winter rainfall and snowmelt, which varies based upon location (Jennings and Hayes 1994).	**Not expected.** Suitable habitat is marginal in the Study Area for this species. Drainages in the Study Area do not support rocky stream habitat but consist of mud-bottom features. Drainages also have been culverted and piped underground upstream of the Study Area and channelized downstream of the Study Area. Heavily manipulated channels do not provide habitat for this species. Nearby CNDDB records for this species that are similarly situated are historic and considered to be extirpated (CDFW 2024).
Spea hammondii western spadefoot	FPT/--/SSC	Amphibian that breeds in vernal pools and seasonal ponds or slow portions of streams in grasslands and woodlands. Adults spend most of their time in underground burrows in grasslands surrounding breeding pools (Jennings and Hayes 1994). Breeding is typically finished by the end of March. Tadpoles mature through late-spring and disperse as pools dry (Zeiner *et al.* 1990).	**May occur**. Suitable habitat is present in seasonal wetlands in the Study Area. This species could breed in seasonal wetland habitats and seeking refuge in upland grassland or woodland habitats. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Reptiles			
Actinemys (=Emys) marmorata northwestern pond turtle	FPT/--/SSC	Turtle that inhabits slow-moving water with dense submerged vegetation, abundant basking sites, gently sloping banks, and dry clay or silt soils in nearby uplands. Turtles will lay eggs up to 0.25-mile from water, but typically go no more than 600 feet (Jennings and Hayes 1994). This species is known to regularly overwinter on land (Ultsch 2006), which it likely does to avoid increased flows during the winter (Thomson *et al.* 2016). This species will use a variety of habitats to overwinter, but typically uses areas above the ordinary high water mark where it burrows into loose soil and/or under leaf litter (Thomson *et al.* 2016). Other nonriverine habitats that experience little water level fluctuation, this species may overwinter under water (Thomson *et al.* 2016).	**May occur.** Suitable habitat is present in the drainages of the Study Area. This species could occur during all life stages in the drainages and nest in uplands along the drainages. There are two CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024). The nearest record documents one adult and one juvenile in 2016 approximately 1.5 miles east of the Study Area along a Ulatis Creek Flood Control Channel (CDFW 2024).
Thamnophis gigas giant garter snake	FT/ST/--	Endemic to the San Joaquin and Sacramento Valley floors. Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands. Requires adequate water during its active season (early spring through mid-fall) to provide food and cover, emergent, herbaceous wetland vegetation for foraging and cover, grassy banks and openings in waterside vegetation for basking, and higher elevation uplands for cover and refuge from flood waters during its dormant season (winter). Inhabits small mammal burrows and other soil crevices with sunny	**Will not occur.** Suitable low gradient streams are not present in the Study Area for this species. Other wetland habitats in the Study Area include seasonal wetlands, which are typically dry during the active season of this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
		exposure along south and west facing slopes, above prevailing flood elevations when dormant. Primarily found in marshes and sloughs as well as slow-moving creeks but absent from large rivers (USFWS 2017c).	
Birds			
Agelaius tricolor tricolored blackbird	--/ST/SSC	Common locally throughout central California. Nests and seeks cover in emergent wetland vegetation and thorny vegetation such as Himalayan blackberry (*Rubus armeniacus*) as well as cattails and tules. Nesting area must be large enough to support a minimum colony of 50 pairs as they are a highly colonial species. Forages on ground in croplands, grassy fields, flooded land, and edges of ponds for insects (Shuford and Gardali 2008).	**May occur.** Suitable fresh emergent wetland habitat is present in the Study Area that could support nesting for this species along drainages. This species could also forage in the Study Area. There is only one record of this species within a 5-mile radius of the Study Area. The record documents this species 4.3 miles south of the Study Area in 2014 and 2015 (CDFW 2024). The record documents up to 1,750 individuals nesting in a detention basin with fresh emergent wetland (CDFW 2024).
Ammodramus savannarum grasshopper sparrow	--/--/SSC	A summer resident of foothills and lowlands west of the Cascade-Sierra Nevada crest. Occurs in grasslands with scattered shrubs or other tall structures which it utilizes as singing perches. Nests on the ground in dense grass with overhanging taller grasses and forbs (Zeiner et al. 1990).	**May occur.** Suitable habitat is present in annual grassland in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Athene cunicularia burrowing owl	--/--/SSC	Forages in grasslands, agricultural fields, and disturbed places where burrowing mammals are abundant with low and sparse vegetation. Nests in burrows, especially those of California ground squirrel (*Otospermophilus beecheyi*) but will use other refuge sites (Shuford and Gardali 2008). In the Central Valley of	**May occur.** Suitable habitat is present in the annual grassland habitat in the Study Area. There are several CNDDB recorded occurrences within a 5-mile radius of the Study Area. The nearest record documents a burrowing owl nest 0.5 mile east of the Study Area at the Nut Tree Airport (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
		California, most foraging occurs within a 600-m radius of the nest (Gervais et al. 2003).	
Buteo swainsoni Swainson's hawk	--/ST/--	Forages in grasslands, suitable grain or alfalfa fields, or livestock pastures adjacent to nesting habitat. Nests on large trees in open riparian habitat, scattered trees or small groves of trees in open areas (CDFW 1994).	**May occur.** Suitable habitat is present in the Study Area and this species could forage or nest in the Study Area. There are several CNDDB reported occurrences of this species within a 5-mile radius of the Study Area (CDFW 2024) and this species is abundant in the region. The nearest CNDDB reported occurrence is located 0.3 mile east of the Study Area at the Nut Tree Airport (CDFW 2024).
Charadrius montanus mountain plover	--/--/SSC	A winter resident of the Central Valley, southern deserts, and southern coast, as well as Texas, Arizona, and northern Mexico; does not breed in California. Found in places with sparse, low-growing vegetation such as fallow or burned agricultural fields, heavily grazed pastures, and playas (Shuford and Gardali 2008).	**Will not occur.** Suitable wintering habitat is not present. This species does not breed in California.
Circus hudsonius northern harrier	--/--/SSC	Inhabits a variety of treeless habitats including freshwater marsh, brackish- and saltwater marsh, wet meadows, lake margins, grasslands, croplands, desert sinks, and sagebrush flats. Builds nests on large mounds of vegetation between March and August. Forages in most open habitats (Shuford and Gardali 2008).	**May occur.** Suitable habitat is present in the annual grassland and wetland habitats in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT/SE/--	Occurs at isolated sites in Sacramento Valley in northern California, and along Kern and Colorado River systems in southern California. Frequents valley foothill and desert riparian habitats. Inhabits open woodlands with clearings, and riparian habitats with dense understory foliage along slow-moving drainages, backwaters, or seeps. Prefers dense willows for roosting but will use adjacent orchard in the Sacramento Valley. Typically requires expansive riparian habitat for nesting (Zeiner et al. 1990).	**Will not occur.** Suitable expansive riparian habitat is not present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Elanus leucurus white-tailed kite	--/--/FP	Raptor that inhabits rolling foothills and valley margins with scattered oaks, as well as river bottomlands or marshes next to deciduous woodland. Nests in isolated, dense-topped trees in open areas. Forages in a variety of habitats including grassland, marshes, and agricultural fields (Zeiner *et al.* 1990).	**Present.** Suitable nesting habitat is present in riparian vegetation along the drainages and isolated trees in the Study Area. This species was observed foraging in the Study Area during site visits in March 2024. There are two CNDDB reported occurrences within a 5-mile radius of the Study Area with the nearest record located 2.2 miles east of the Study Area (CDFW 2024). The record documents this species nesting in 2001 (CDFW 2024).
Haliaeetus leucocephalus Bald eagle	FD/SE/FP	Requires large bodies of water with an abundant fish population. Feeds on fish, carrion, small mammals, and waterfowl. Nests are usually located within a 1-mile radius of water. Nests are most often situated in large trees with a commanding view of the area (Zeiner *et al.* 1990).	**Will not occur.** Suitable nesting habitat is not present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Icteria virens Yellow-breasted chat	--/--/SSC	This species inhabits low dense riparian thickets of willow and blackberry as well as other brushy tangles near watercourses occurs in the Klamath and North Coast Ranges, in the Central Valley, and locally through the Peninsular and South Coast Ranges and Sierra Foothills. This species nests and forages within 10 feet of the ground.	**Will not occur.** The Study Area is outside of the known range of this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Laterallus jamaicensis coturniculus California black rail	--/ST/FP	Inhabits brackish marsh, primarily in the upper marsh zone dominated by alkali heath (*Frankenia salina*), cattail, and rush (*Juncus* spp.); prefers lower salinity environments. In the Sierra Nevada foothills, black rail is a year-round resident along wetland edges where water is 1.2 inches or less (Richmond et al. 2010). Black rail is typically associated with perennial wetlands associated with flowing water such as irrigation canals, perennial streams and springs with dense vegetation in the Sierra Nevada foothills (Richmond et al. 2010). Forages on the ground, under cover of dense vegetation (Richmond et al. 2010).	**Will not occur**. Suitable brackish marsh habitat is not present. In the Sierra Nevada foothills, this species will occupy freshwater wetlands. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Rallus obsoletus obsoletus California Ridgway's rail	FE/SE/FP	Salt-water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed but feeds away from cover on invertebrates from mud-bottomed sloughs (CDFW 2023).	**Will not occur.** Suitable tidal marsh habitat is not present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Mammals			
Antrozous pallidus pallid bat	--/--/SSC	Occurs throughout California except for the high Sierra Nevada and the northern Coast Ranges. Habitats include grasslands, shrublands, woodlands, and forests from sea level to 6,000 feet (Bolster, ed. 1998). This species is very sensitive to disturbance of roosting sites. Common roost sites are rock crevices, old buildings, bridges caves, mines, and hollow trees (Barbour and Davis 1969).	**May occur.** Suitable habitat is present in woodlands where tree hollows may be present. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Corynorhinus townsendii Townsend's big-eared bat	--/--/SSC	Widely distributed throughout California except alpine and subalpine habitats. This species eats moths, beetle and other insects which it catches on the wing or by gleaning from vegetation. Typically found near water since it is poor at concentrating its urine. This species uses caves, mines, tunnels, buildings and human made structures for roosting. Maternity roosts are typically in warm sites. Hibernation sites are typically cold, but not freezing. This species is very sensitive to disturbance and may abandon its roost after one visit (Zeiner *et al.* 1990).	**Will not occur.** Suitable roosting habitat, such caves or mines, are not present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Lasiurus blossevillii western red bat	--/--/SSC	Roosts primarily in woodlands and forests amongst branches and avoids roosting in caves or buildings (Bolster 1998). Forages in open habitat such as croplands, grasslands and shrublands. This species is typically associated with water and has a poor urine concentrating ability. Primarily roosts solitarily in trees from 2–40 feet high in the trees, with females and young roosting higher in the trees than males. Forages along edge habitats (Zeiner et al. 1990). This species is rarely found in the winter at locations that freeze (Pierson et al. 2006).	**Not expected.** Suitable woodland habitat is not present, with the exception of narrow riparian areas along drainages in the Study Area. This species is not expected to occur roosting in the Study Area but is likely to forage or disperse through the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).
Sorex ornatus sinuosus Suisun shrew	--/--/SSC	Suisun shrew has a restricted geographic range distribution. It occurs in tidal and brackish marsh communities along the north shore of San Pablo and Suisun Bays, from Sonoma Creek and Tubbs Island, Sonoma County on the West, eastward to Grizzly Island, Solano County (Bolster ed. 1998). This species inhabits marshlands 1.8 to 2.4 meters above sea level which are not regularly flooded by tidewater (Bolster ed. 1998).	**Will not occur.** Suitable tidal marsh habitat is not present in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2024).

Scientific Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur[3]
Taxidea taxus American badger	--/--/SSC	Inhabits drier open stages of most shrub, forest, and herbaceous habitats with loose, friable soils. Preys on a wide variety of mammals, reptiles, birds, and carrion, and hunts mostly by digging out fossorial prey. Occasionally takes prey on the surface. Not tolerant of cultivation. No longer occurs in the Central Valley except in the extreme western edge (Williams 1986).	**Not expected.** Suitable habitat is present for this species throughout the Study Area in undeveloped habitats, however the Study Area is surrounded by urban development with busy roadways, which is not conducive to sustaining a viable population in isolated habitat. However, if present, this species could burrow in woodland and grassland habitat in the Study Area. There is one CNDDB recorded occurrence for this species within a 5-mile radius of the Study Area. The record documents a detection of badger foraging in 2016, although the species was not specifically observed (CDFW 2024).

1 Sensitive species reported in CNDDB or CNPS on the "*Dixon, Winters, Merritt, Monticello Dam, Dozier, Mt. Vaca, Fairfield North, Elmira, and Allendale*" USGS quads, or in USFWS lists for the project site.

2 Status is as follows: Federal (ESA) listing/State (CESA) listing/other CDFW status or CRPR. F = Federal; S = State of California; E = Endangered; T = Threatened; C = Candidate; FP=Fully Protected; SSC=Species of Special Concern; WL=Watch List.

3 Status in the Project site is assessed as follows. **Will Not Occur**: Species is either sessile (i.e., plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur on the project site; **Not Expected**: Species moves freely and might disperse through or across the project site, but suitable habitat for residence or breeding does not occur on the project site, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100% certainty; **Presumed Absent:** Habitat suitable for residence and breeding occurs on the project site; however, focused surveys conducted for the current project were negative; **May Occur**: Species was not observed on the site and breeding habitat is not present but the species has the potential to utilize the site for dispersal, **High**: Habitat suitable for residence and breeding occurs on the project site and the species has been recorded recently on or near the project site, but was not observed during surveys for the current project; **Present**: The species was observed during biological surveys for the current project and is assumed to occupy the project site or utilize the project site during some portion of its life cycle.

CRPR = California Rare Plant Rank: 1B – rare, threatened, or endangered in California and elsewhere; 2B – rare, threatened, or endangered in California but more common elsewhere. Extension codes: .1 – seriously endangered; .2 – moderately endangered.

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Appendix D

Plant and Wildlife Species Observed in the Study Area

Family	Species Name	Common Name	Status
Native			
Apiaceae	*Eryngium castrense*	Great Valley eryngo	--
Betulaceae	*Alnus rhombifolia*	white alder	--
Asteraceae	*Achillea millefolium*	common yarrow	--
	Artemisia douglasiana	California mugwort	--
	Baccharis pilularis	coyote brush	--
	Baccharis salicifolia	mule fat	--
	Centromadia fitchii	spikeweed	--
	Xanthium strumarium	rough cocklebur	--
Boraginaceae	*Amsinckia intermedia*	common fiddleneck	--
Cyperaceae	*Carex barbarae*	valley sedge	--
	Cyperus eragrostis	tall flatsedge	--
	Eleocharis macrostachya	common spikerush	--
	Schoenoplectus californicus	California bulrush	--
Fabaceae	*Cercis occidentalis*	redbud	--
	Lupinus bicolor	annual lupine	--
Fagaceae	*Quercus agrifolia*	coast live oak	--
	Quercus lobata	valley oak	--
Juglandaceae	*Juglans hindsii*	Northern California black walnut	--
Juncaceae	*Juncus balticus*	wire rush	--
Onagraceae	*Epilobium brachycarpum*	annual fireweed	--
Papaveraceae	*Eschscholzia californica*	California poppy	--
Poaceae	*Elymus (=Leymus) triticoides*	beardless wildrye	--
	Phragmites australis	common reed	--
	Stipa pulchra	purple needlegrass	--
Rosaceae	*Heteromeles arbutifolia*	toyon	--
	Prunus ilicifolia	hollyleaf cherry	--
	Rosa californica	California rose	--
	Rubus ursinus	California blackberry	--
Rubiaceae	*Cephalanthus occidentalis*	common buttonbush	--
Salicaceae	*Populus fremontii*	Fremont cottonwood	--
	Salix exigua	narrowleaf willow	--
	Salix gooddingii	Gooding's willow	--
	Salix laevigata	polished willow	--
Sapindaceae	*Aesculus californica*	California buckeye	--
Themidaceae	*Brodiaea elegans*	harvest brodiaea	--
	Triteleia laxa	Ithuriel's spear	
Typhaceae	*Typha latifolia*	common cattail	--
Non-native			
Alismataceae	*Alisma lanceolatum*	lanceleaf water plantain	--
Apiaceae	*Daucus carota*	wild carrot	--
	Foeniculum vulgare	sweet fennel	Moderate
Arecaceae	*Washingtonia robusta*	Mexican fan palm	Moderate
Asteraceae	*Carduus pycnocephalus*	Italian thistle	Moderate
	Centaurea solstitialis	yellow-star thistle	High
	Dittrichia graveolens	stinkwort	Moderate
	Helminthotheca echioides	bristly ox-tongue	Limited
	Lactuca serriola	prickly lettuce	--

Family	Species Name	Common Name	Status
Brassicaceae	*Brassica nigra*	black mustard	Moderate
	Hirschfeldia incana	summer mustard	Moderate
	Sisymbrium altissimum	tumble mustard	--
Caryophyllaceae	*Spergularia rubra*	purple sand spurry	--
Casaurinaceae	*Casuarina equisetifolia*	beach sheoak	--
Convolvulaceae	*Convolvulus arvensis*	field bindweed	--/C
Dipsacaceae	*Dipsacus fullonum*	wild teasel	Moderate
Fabaceae	*Medicago polymorpha*	bur clover	Limited
	Trifolium hirtum	rose clover	Limited
	Vicia sativa	spring vetch	--
Fagaceae	*Quercus suber*	cork oak	--
Geraniaceae	*Erodium botrys*	broad leaf filaree	--
	Geranium dissectum	cranesbill	Limited
Malvaceae	*Malva parviflora*	cheeseweed	--
Myrtaceae	*Eucalyptus globulus*	blue gum	Limited
Oleaceae	*Olea europaea*	olive tree	Limited
Pinaceae	*Pinus pinea*	stone pine	--
Plantaginaceae	*Plantago lanceolata*	English plantain	Limited
Poaceae	*Arundo donax*	giant reed	High
	Avena barbata	slender oats	Moderate
	Bromus diandrus	common ripgut grass	Moderate
	Bromus hordeaceus	soft brome	Limited
	Cynodon dactylon	Bermuda grass	Moderate
	Elymus caput-medusae	medusahead	High
	Festuca myuros	rattail sixweeks grass	Moderate
	Festuca perennis	Italian ryegrass	--
	Glyceria occidentalis	western manna grass	--
	Hordeum marinum ssp. *gussoneanum*	Mediterranean barley	--
	Hordeum murinum	foxtail barley	Moderate
	Phalaris aquatica	Harding grass	Moderate
	Poa annua	annual blue grass	--
	Polypogon monspeliensis	annual beard grass	Limited
Polygonaceae	*Polygonum aviculare*	prostrate knotweed	--
	Rumex crispus	curly dock	Limited
Rosaceae	*Rubus armeniacus*	Himalayan blackberry	High

Family	Scientific Name	Common Name
Amphibians		
Hylidae	*Pseudacris sierra*	Sierran treefrog
Ranidae	*Lithobates catesbeianus*	American bullfrog
Reptiles		
Colubridae	*Pituophis catenifer catenifer*	Pacific gopher snake
Phrynosomatidae	*Sceloporus occidentalis*	western fence lizard
Birds		
Accipitridae	*Accipiter striatus*	sharp-shinned hawk
	Accipiter cooperii	Cooper's hawk
	Buteo jamaicensis	red-tailed hawk
	Buteo lineatus	red-shouldered hawk
	Elanus leucurus	white-tailed kite
Aegithalidae	*Psaltriparus minimus*	bushtit
Anatidae	*Anas platyrhynchos*	mallard
	Branta canadensis	Canada goose
Bombycillidae	*Bombycilla cedrorum*	cedar waxwing
Cathartidae	*Cathartes aura*	turkey vulture
Charadriidae	*Charadrius vociferus*	killdeer
Columbidae	*Columba livia*	rock pigeon
	Zenaida macroura	mourning dove
Corvidae	*Aphelocoma californica*	California scrub-jay
	Corvus brachyrhynchos	American crow
	Corvus corax	common raven
Falconidae	*Falco sparverius*	American kestrel
Fringillidae	*Haemorhous mexicanus*	house finch
	Spinus psaltria	lesser goldfinch
Hirundinidae	*Tachycineta thalassina*	violet-green swallow
Icteridae	*Agelaius phoeniceus*	red-winged blackbird
	Sturnella neglecta	western meadowlark
Mimidae	*Mimus polyglottos*	northern mockingbird
Odontophoridae	*Callipepla californica*	California quail
Parulidae	*Setophaga coronate*	yellow-rumped warbler
Passeridae	*Passer domesticus*	house sparrow
Passerellidae	*Melospiza melodia*	song sparrow
	Passerculus sandwichensis	savannah sparrow
	Zonotrichia leucophrys	white-crowned sparrow
Picidae	*Colaptes auratus*	northern flicker
	Dryobates nuttallii	Nuttall's woodpecker
Rallidae	*Fulica americana*	American coot
Sturnidae	*Sturnus vulgaris*	European starling
Trochilidae	*Calypte anna*	Anna's hummingbird
Tyrannidae	*Sayornis nigricans*	black phoebe
	Sayornis saya	Say's phoebe
Mammals		
Cricetidae	*Microtus californicus*	California vole
Castoridae	*Castor canadensis*	North American beaver
Leporidae	*Lepus californicus*	black-tailed jackrabbit

Appendix E

Representative Photographs



Photo 1. Representative view of vernal pool system grassland. Photo date 3/12/2024.



Photo 2. Representative view of a large vernal pool impounded by a walking path in vernal pool system grassland. Photo date 3/12/2024.

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Photo 3. Representative view of seasonal marsh habitat in the southern portion of the Study Area. Photo date 3/14/2024.



Photo 4. Representative view of perennial marsh habitat in the southern portion of the Study Area. Photo date 3/14/2024.

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Photo 5. Representative view of a perennial drainage in the northern portion of the Study Area with a beaver dam. Photo date 3/12/2024.



Photo 6. Representative view of an intermittent drainage in the southern portion of the Study Area. Photo date 3/14/2024.

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Photo 7. Representative view of urban windrow habitat. Photo date 3/14/2024.



Photo 8. Representative view of urban habitat at a recreational facility. Photo date 3/14/2024.

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Appendix E

Cultural Resources Assessment

Centennial Park Master Plan Project

Cultural Resources Assessment

June 2024 | 04776.00004.001

Prepared for:

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EXECUTIVE SUMMARY

This report summarizes the findings of a Cultural Resources Assessment completed by HELIX Environmental Planning, Inc. (HELIX) for the Centennial Park Master Plan Project (proposed project) located north of the intersection of Browns Valley Parkway and Allison Drive within the City of Vacaville (City), in Solano County, California. The proposed project includes the expansion of the existing Centennial Park, and additional amenities to be developed would include a dog park, bike skills course, 18-hole disc golf course, community recreation center and outdoor seating area, tennis courts, soccer complex expansion, water play area, skate park, remote-controlled car track, basketball courts, ballfield maintenance building and restroom, event pavilion, pollinator garden, nature playscape area, sand volleyball courts, trails, group picnic areas, and landscaping. This Cultural Resources Assessment has been prepared for the City to ensure compliance with State and local laws and regulations as they relate to cultural resources, including the California Environmental Quality Act (CEQA). In addition, because the proposed project may impact jurisdictional waters of the U.S., a Section 404 permit under the Clean Water Act from the U.S. Army Corps of Engineers (USACE) may be required. Therefore, the proposed project qualifies as an undertaking that is subject to the requirements of Section 106 of the National Historic Preservation Act (NHPA).

A records search of the Area of Potential Effects (APE) plus a 0.25-mile radius identified twenty-five (25) previous cultural resource studies, including eight (8) that partially overlap with the APE. The records search also identified ten (10) previously recorded cultural resources within the 0.25-mile search radius, one of which, resource P-48-001025 (the Vaca Valley Railroad Route/Southern Pacific Railroad), was reported by the Northwest Information Center (NWIC) as lying within the western portion of the APE itself. The nine (9) other resources previously recorded in the project vicinity consist of historic-era built-environment features including single family residential properties, commercial buildings, ranches, water management features, and a managed landscape associated with a historic-era farm/orchard. While the NWIC reported location of resource P-48-001025 lies within the APE, and was determined by HELIX to merit further examination, none of the other 9 previously identified resources within the project vicinity would be impacted by the proposed project.

A search of the Sacred Lands File (SLF) maintained by the Native American Heritage Commission (NAHC) indicated that there are no recorded occurrences of Native American sacred sites and/or human remains in the APE and vicinity. The NAHC also provided a list of twelve (12) Native American points of contact who might have additional information to provide regarding cultural resources in the vicinity of the APE. HELIX reached out to each of these recommended points of contact via written letter on February 23, 2024. As of the date of this report, no responses from these contacts have been received.

HELIX staff conducted a pedestrian survey of accessible portions of the APE and made concerted efforts to examine the area reported by the NWIC to contain a segment of resource P-48-001025 (the Vaca Valley Railroad Route/Southern Pacific Railroad). Ground surface visibility within the APE ranged between low (20%) and moderate (60%) as a result of recent heavy rains, which resulted in pooling water and new grass growth. HELIX's surveyor examined the entirety of the reported location of this resource within the currently proposed APE and found no traces of the railroad alignment. No raised berm or railroad bed/grade were found nor were any railway ties or associated metal or wooden debris. Instead, HELIX's surveyor observed that a paved walkway/bike path associated with Centennial Park now occupies resource P-48-001025's reported alignment through the currently proposed APE. Further, in speaking with Hew Hesterman, Park Planner for the City of Vacaville who was on site to walk the

NWIC reported location of the railroad segment with HELIX's surveyor, it was learned that the entirety of the railroad tracks were removed in 2006 for the purpose of the installation of the now extant paved walkway/bike path (Hew Hesterman pers comms 5/1/24). In light of this information and the results of HELIX's pedestrian survey, HELIX staff prepared a Department of Parks and Recreation (DPR) 523I – Continuation Sheet/Site Update form for resource P-48-001025 to note the absence of this resource within the boundaries of the currently proposed APE and recommend the segment of this resource reported as lying within the currently proposed APE as ineligible for listing in the NRHP or CRHR on the grounds that it does not retain integrity to its period of historic significance.

Ultimately, the APE was thoroughly inspected during HELIX's pedestrian survey. and no prehistoric or historic-era archaeological materials or features were observed.

Based on the results of this Cultural Resource Assessment, HELIX concludes that the following findings are appropriate for the project:

- ***No Significant Impact*** to Historical or Unique Archaeological Resources under CEQA Guidelines Section 15064.5;

- ***No Historic Properties Affected*** under Section 106 (36 CFR Part 800.4(d)(1)); and,

- ***No Significant Impact to Human Remains*** resulting from disturbance.

No additional study or documentation for cultural resources are recommended at this time. However, in the unlikely event that archaeological cultural resources and/or human remains are discovered during project construction, the provisions recommended in Section 6.2 of this report should be implemented to avoid or substantially reduce the severity of impacts to such finds.

1.0 INTRODUCTION

The City of Vacaville proposes to expand, improve, renovate, and landscape portions of the existing Centennial Park located at 501 Browns Valley Parkway, within the City of Vacaville, Solano County, California (see Figures 1 – 3 in Appendix A). Based on the nature of the proposed project, it qualifies as an *undertaking* subject to the requirements of Section 106 of the National Historic Preservation Act (NHPA) and a *project* under the California Environmental Quality Act (CEQA). A Cultural Resource Assessment (CRA) has been prepared to document compliance with all federal, State, and local laws and regulations as they relate to cultural resources for the proposed project. HELIX Environmental Planning, Inc. (HELIX) prepared this CRA to identify cultural resources that may be subject to impact or disturbance as a result of project implementation.

1.1 PROJECT DESCRIPTION

The Centennial Park Master Plan Project is located north of the intersection of Browns Valley Parkway and Allison Drive, west of Nut Tree Airport, and south of Allison Parkway in the City of Vacaville, Solano County, California. The park is located within the Los Putos Land Grant and is depicted within the U.S. Geological Survey (USGS) 7.5-minute *Allendale, California* and *Elmira, California* topographic quadrangle maps (see Figure 2 in Appendix A).

The Centennial Park Master Plan Project will include the expansion of facilities and amenities in Centennial Park, which encompasses approximately 276 acres. The additional amenities to be developed include a dog park, bike skills course, 18-hole disc golf course, community recreation center and outdoor seating area, tennis courts, soccer complex expansion, water play area, skate park, remote-controlled car track, basketball courts, ballfield maintenance building and restroom, event pavilion, pollinator garden, nature playscape area, sand volleyball courts, trails, group picnic areas, and landscaping. The project will also include the expansion of the park's primary parking lot from approximately 380 existing spaces to over 1,000 surfaced parking spaces and would extend the Allison Parkway access point in the northern portion of the project site. The Centennial Park Master Plan Project is anticipated to be developed over time in phases as funding becomes available.

1.2 AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) for the project is defined as the geographic area within which project activities may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE for the project comprises 276 acres, which is coterminous with the park's current boundary, and includes the area of direct impacts associated with project development. The vertical dimension of the APE would be up to 85 feet as the bike skills course is proposed to be elevated on a constructed hill. Subsurface dimensions of the APE are anticipated to be up to 10 feet below ground surface for the construction of the detention basins near the Horse Creek soccer complex and installation of utilities. The APE is surrounded by residential development to the west, vacant grass fields to the south, a church and industrial lot to the north, and is bounded by the Putah South Canal to the east. The terrain of the APE itself consists of a landscaped public park with parking lots, developed sports fields with ancillary structures, and open grass fields. The APE also contains dirt and paved walkways as well parking lots and driveways.

1.3 PERSONNEL

This CRA was conducted by HELIX Senior Archaeologist Benjamin Siegel, MA, RPA. Mr. Siegel meets the Secretary of the Interior's Professional Qualifications Standards for Archeology (36 CFR Part 61) and is a cultural resources project manager with 14 years of professional experience throughout California and the United States. He has overseen numerous projects for compliance with Section 106 of the NHPA and CEQA. The pedestrian survey for this project was conducted by Staff Archaeologist, Jentin Joe, under the supervision of Mr. Siegel. Mr. Joe is an archaeologist with over five years of archaeological experience throughout the state of California.

Resumes for Mr. Siegel and Mr. Joe are included in Appendix B.

2.0 PROJECT SETTING

2.1 NATURAL SETTING

The APE is located within the unsectioned lands of the Los Putos Land Grant and is depicted within the USGS 7.5-minute *Allendale, California* and *Elmira, California* topographic quadrangle maps. Centennial Park is on the western edge of the Central Valley of California, just to the east of the English Hills and at the foot of a small ridge. The elevation of the park is roughly 150 feet above mean seal level. The natural soils range in color from a light gray brown to tan brown alluvial deposits, consisting of roughly 45 percent pea gravels. The three perennial drainages that run through the project area have been channelized and empty to the Putah Canal located to the east of the APE. The native vegetation for Centennial Park area has been described as California Prairie, consisting of bunchgrass communities, ranging from dense to somewhat open, punctuated with forbs (herbaceous flowering plants common in grasslands) (Kuchler 1977:23). Close to water ways within and near the project area, riparian trees including willow (s*alix lasiolepis*), alder (*rhamnus alnifolia*), and California Bay Laurels (*umbellularia californica*), are present.

2.2 CULTURAL SETTING

The following is a brief overview of the prehistory, ethnography, and historic background of the project area. This setting provides a historical context for cultural resources that might be found in the vicinity of the APE. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview of human occupations and uses of the general project vicinity.

2.2.1 Precontact

Early archaeological investigations in central California were conducted at sites located in the Sacramento-San Joaquin Delta region. The first published account documents investigations in the Lodi and Stockton area (Schenck and Dawson 1929). The initial archaeological reports typically contained descriptive narratives, with more systematic approaches sponsored by Sacramento Junior College in the 1930s. At the same time, University of California at Berkeley excavated several sites in the lower Sacramento Valley and Delta region, which resulted in recognizing archaeological site patterns based on variations of inter-site assemblages. Research during the 1930s identified temporal periods in central California prehistory and provided an initial chronological sequence (Lillard and Purves 1936; Lillard et al. 1939). In 1939, Lillard noted that each cultural period led directly to the next and that influences

spread from the Delta region to other regions in central California (Lillard et al. 1939). In the late 1940s and early 1950s, Beardsley documented similarities in artifacts among sites in the San Francisco Bay region and the Delta and refined his findings into a cultural model that ultimately became known as the Central California Taxonomic System (CCTS). This system proposed a uniform, linear sequence of cultural succession (Beardsley 1948 and 1954). The CCTS system was challenged by Gerow, whose work looked at radiocarbon dating to show that Early and Middle Horizon sites were not subsequent developments but, at least partially, contemporaneous (1954; 1974; Gerow and Force 1968).

To address some of the flaws in the CCTS system, Fredrickson (1973) introduced a revision that incorporated a system of spatial and cultural integrative units. Fredrickson separated cultural, temporal, and spatial units from each other and assigned them to six chronological periods: Paleo-Indian (10000 to 6000 B.C.); Lower, Middle, and Upper Archaic (6000 B.C. to A.D. 500), and Emergent (Upper and Lower, A.D. 500 to 1800). The suggested temporal ranges are similar to earlier horizons, which are broad cultural units that can be arranged in a temporal sequence (Moratto 1984). In addition, Fredrickson defined several patterns—a general way of life shared within a specific geographical region. These patterns include:

- Windmiller Pattern or Early Horizon (3000 to 1000 B.C.);
- Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500); and,
- Augustine Pattern or Late Horizon (A.D. 500 to historic period).

Brief descriptions of these temporal ranges and their unique characteristics follow.

Windmiller Pattern or Early Horizon (3000 to 1000 B.C.)

Characterized by the Windmiller Pattern, the Early Horizon was centered in the Cosumnes district of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of numerous types of terrestrial and aquatic species (Bennyhoff 1950; Ragir 1972). Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicate an extensive trade network that may represent the arrival of Utian populations into central California. Also, indicative of this period are rectangular Haliotis, Olivella shell beads, and charmstones that usually were perforated.

Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500)

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson (1973) suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some

cremations. As noted by Lillard, the practice of spreading ground ochre over the burial was common at this time (Lillard et al. 1939). Grave goods during this period are generally sparse and typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual (Hughes 1994). During this period, larger populations are suggested by the number and depth of sites compared with the Windmiller Pattern. According to Fredrickson (1973), the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.

Augustine Pattern or Late Horizon (A.D. 500 to Historic Period)

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns became the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of Haliotis ornaments of many elaborate shapes and forms. Burial patterns retained the use of flexed burials with variable orientation, but there was a reduction in the use of ochre and widespread evidence of cremation (Moratto 1984). Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions. Johnson (1978) suggests that the Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Berkeley Pattern.

Central California research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of prehistoric populations (Dickel et al. 1984). Although debate continues over a single model or sequence for central California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

The oldest archaeological sites in the vicinity of the project area are few in number and consist of evidence of occupations by groups which made use of lithic tools associated with the Lower Berkeley Pattern of the San Francisco Bay and the Windmiller Pattern of the Delta area, which date to between 3,000 and 500 BC. Beyond this however, the archaeology of the foothill margins along the east slope of the Central Valley, and in Solano County, is poorly understood and under researched. Having said that, it is suggested through linguistic data that the ancestors of the cultural groups encountered in the project area by the earliest European explorers, moved into the area around sometime between 200 and 700 AD (Whistler 1977, McCarthy 1985). These peoples are known as the Patwin.

2.2.2 Ethnography

At the time of historic exploration to the region, the project area was located within the territory occupied by Patwin tribelets (Johnson 1978, Kroeber 1925). Emanating from southern Oregon and the Columbia and Modoc Plateau, Patwin groups are thought to have traveled to this area following major drainage systems including the Yuba, America, Sacramento and Feather rivers. The Patwin in the vicinity of the project area are thought to have spoken the Patwin language (sometimes called "*Wintu T'ewe*") a language that is part of the Wintuan language family along with Wintu and Nomlaki. The Patwin dialect spoken in this area

(South Patwin) is so distinct from the other Patwin dialect groups that some have considered it to be a separate language altogether (Whistler 1980, Shepard 2005). Detailed information on the southern Patwin groups is scarce, as even early ethnographers in the area (1870s) were unable to find large settlements and or individuals from this group from whom to gather data (Powers 1976, Kroeber 1925). Instead, the majority of our understanding comes from locals of Spanish descent who had been living in the area, and from what is known of Northern Patwin groups, and other neighboring cultures (McKern 1922, 1923, Kroeber 1932, Merriam 1955, 1966, Barrett 1908, Bennyhoff 1977).

Patwin settlement patterns consisted of a variety of larger permanent villages and population centers, and smaller temporary camps developed in specific locations to facilitate the exploitation of various resources. Patwin habitation sites were often established along on high ground and banks along the Sacramento River or tributary streams including the Cache, Putah, and Ulatis creeks, and valleys within the coastal range. *The Ululato* tribelet, once occupied *Ululato,* a Patwin village located in the present-day location of the city of Vacaville. Ulatis Creek, which drains to the east through Vacaville, takes its name from this group. The *Ululato* were documented by Luis Arguello on October 23, 1821, and *Ululato* natives are known to have been baptized at Mission San Francisco between 1815 and 1822 and at Mission San Francisco Solano in 1823 and 1833 (Milliken 1994:258). These mission records also show that some *Ululato* intermarried with Malaca peoples, a closely related southern Patwin tribelet.

Generally, habitation sites of the Patwin were often located near water sources, with larger villages mostly occupied during the winter months. In colder months, camps were built along the margins of bay marshes and estuaries to facilitate the hunting of water birds. These winter houses were earth-covered semi-subterranean multi family structures 20-30 feet in diameter, while rectangular brush ramadas were used in summer (McKern 1923). In warmer seasons satellite or temporary villages were established further away from main villages to facilitate the collection of resources (Johnson 1978:350). Villages would consist of bark houses, with each house containing a single family Long before the arrival of Europeans the largest Patwin villages were able to grow to tremendous size due to the abundance of resources throughout the Sacramento River and bay resources, reaching upwards of 1,000 individuals or more (Powers 1976:219-220). In plains areas, the Patwin only built temporary camps during the summer months. This was partially due to the absence of firewood and is also attributed to the persistence of nuisance insects such as gnats during the summer, which were extremely unpleasant (Powers 1976:219, Johnson 1978:351).

Patwin populations subsisted on resources from abundant nearby fisheries, plant foods including seeds, nuts (especially acorns which served as a dietary staple in the form of soup or gruel), berries, tubers and leafy greens and wild game including tule elk, antelope, and waterfowl (Kroeber 1932:275-280). Many of these plant resources would be dried and stored for use during later seasons (Bennyhoff 1977). During seasonal salmon runs communities would come together to fish and build fishing weirs, nets, and tule watercraft to help facilitate the activity. The seasonal availability of these resources would determine the gathering schedule.

Politically, the Patwin were divided into tribelets, each with its own chief, who would have lived in the group's major permanent village. Patwin chiefs held more authority than other chiefs who governed over other central California groups (McKern 1922; Kroeber 1925, 1932, Johnson 1978). Here, ceremonial events would be held. Chiefdom was inherited patrilineally, but village elders also held sway over who would actually take on the role. Leadership responsibilities consisted of overseeing religious ceremonies and overseeing economic prosperity. Larger "dance houses" up to 50 feet in diameter were the centers of a complex ceremonial system called the "Kuksu Cult" a series of spirit impersonations

held from October to May by a powerful secret society. Little is known about this cult and the ritual dances, but it is suspected that these were perceived by Patwin as essential for the maintenance of proper order of nature and human's role within it (Kroeber 1925). The chief of a village would also make determinations regarding when and where fishing, hunting, and or gathering efforts would take place. The chief also helped to resolve intra- and extra-tribal conflicts, either through negotiations or in cases of territorial disputes outright war with neighboring groups.

In terms of trade, Patwin groups bartered and purchased items with clam shell disk bead currency. Patwin groups are known to have traded for pine nuts, seeds, bear hides, beads, sinew-backed bows, shell beads, magnesite, salt, clams and obsidian. In exchange they would offer salmon, river otter pelts, cordage, shell beads, and yellow hammer headbands (Davis 1974:34-35). Patwin groups were also renowned for their weaved baskets, which would be made in many shapes and sizes to assist with the gathering and storing of resources and in the preparation of foods. Skilled weavers would use sedge roots and willow and redbud shoots in the production of the baskets which were also imbued with elaborate designs (McCarthy 1985).

The missionization of California proved disastrous for the Patwin who lived in proximity to the San Francisco Bay. The missions established in the region (Delores, San Jose, and Sonoma) would all recruit "neophytes" from Patwin villages. As early as 1800, for example, Patwin from the Aguastos village were taken to Mission Delores. Mariano Vallejo exerted political control of Sonoma and the surrounding area in the 1820s. He worked towards an amicable relationship with local indigenous groups including the Southern Patwin under Chief Solano, who proved to be a skilled diplomat.

In the late 1840s however, the Gold Rush changed local dynamics in the area. During this period, the Southern Patwin way of life was tremendously disturbed. Diseases took a heavy toll on local populations, and kidnappings for forced labor on ranchos or violent raids on villages by Euro-American settlers became common. While some Patwin successfully assimilated into surrounding populations and towns, the Southern Patwin village system and their traditional lifeways were all but destroyed by the time early ethnographer Stephen Powers surveyed their former territories in 1871-72 (Powers 1976).

2.2.3 History

Spanish control of the project vicinity throttled up during the 1770s. In the late 1760s and 1770s, several Spanish expeditions explored coastal areas within present day Solano and Contra Costa counties. In 1776, Mission San Francisco de Asis (Delores) and the Presidio were founded. By 1797, Mission San Jose de Guadelupe was established near Fremont, and in 1823, San Francisco de Solano near Sonoma was established. From these seats of Spanish power, outposts and ranchos were established in the vicinity. These ranchos were used to supply missions with cattle, sheep, grains, and fruits and vegetables.

Expeditions were launched from these missions to collect "neophytes" from neighboring indigenous tribes, and when tribes resisted these efforts, or when neophytes managed to escape, the Spaniards would send raiding parties to retrieve the runaways and or exact revenge on tribes to ensure future compliance. During the early 1830s, Mariano Vallejo gained the confidence of Francisco Solano, a Patwin Tribal chief. Chief Solano was eventually made one of Vallejo's lieutenants and later received title to a 17,000-acre rancho (Rancho Suscol), which was later sold to Vallejo. The County of Solano received its name from this Patwin chief.

Mexican independence from Spain brought sweeping changes to the area, with the end Spanish domination in the bay area, the secularization of the missions in 1833, and the opening up of huge tracts of land for settlement, cultivation, and animal husbandry. During the Mexican Period, former soldiers and prominent citizens developed and resided on ranchos, which were self-sustaining farm and homesteads. Many indigenous peoples were put to work on these rancheros. Some for pay, while others were simply forced to work. Some residents applied for and obtained large grants (known as Mexican Land grants), but title was not given for this grant until the end of the 1800s, long after California was incorporated into the United States.

The Mexican rancho system eventually fell into disarray because owners had difficulty retaining control of their property. Though largely self-sufficient, this sufficiency was in part supported by the ability to sell off excess livestock and farm products which were cultivated on the expansive parcels of rancho land. With the annexation of California by the US and the Gold Rush of 1848, squatters on ranchos became a serious problem, with owners having little capacity to enforce or protect their borders from the would-be intruders. In addition, some ranchos periodically fell on hard times economically, and owners would find themselves obligated to sell off portions of larger ranches to pay for debts incurred in labor and maintenance costs.

In the 1840s, Americans began to settle in the lands that today lie in Solano County. The first such American was John Wolfskill who brought some 96 head of cattle to the area and built a small settlement on Putah Creek. Wolfskill was the first of what would eventually become a steady stream of cattle ranchers moving into the area during the 1850s. The area that would eventually grow into the city of Vacaville was first settled by Wolfskill, Jose Armijo, Juan Felipe Pena, and Juan Manuel Vaca in the 1840s, who constructed several buildings and structures in the vicinity of the present-day town. Subsequent developments in the area were associated with agricultural use of the region, and ranching operations. Soon ranching and grain cropping would become the primary economic base of the region. To move surpluses of grain to the San Francisco area, boats began to ply the Cordelia, Suisun and Lindsay Slough, and Suisun and Laguna Creeks which provided access to Benecia. From there these goods were shipped to the city. Nearby Fairfield developed in direct response to an influx of agriculturalists and ranchers who settled in Solano County during and after the gold rush period in the Sierra Nevada. Agriculture only grew in importance at the turn of the 20th century, with Vacaville being planted in row crops and orchards.

Throughout the 1850s, towns and cities in the area would continue to grow and developed into places of commerce. In 1850, Rockville was founded, and by 1852 Suisun City had become a major trading center. Soon after, in 1853, the town of Cordelia (named after the wife of its founder, R. H. Waterman) was established as a shipping center for the region, and it quickly became a regular stop for stagecoaches headed east, north, and west. By the end of the decade however, Cordelia started to fall out of favor as a shipping center, and Waterman chose to donate funds and lands to help establish the city of Fairfield, which became the county seat in 1858.

In the late 1800s, Vacaville saw continued growth in the expanding fruit industry. Fruit orchards came to occupy much of the Vaca Valley and the surrounding foothills, and by the turn of the 20th century half of all California's deciduous fruit was produced in the Vaca Valley, Pleasants and Lagoon Valleys, and the hills adjacent to the Putah Creek area, including the English Hills (Delaplane 1995). Through the 1940s the regular population of the Vaca Valley remained around 1,500 residents, but every spring and summer, migrant workers would congregate in the area to help harvest, package, and ship, the seasonal produce. During these times some 5,000 men, women, and children would find employment in this way,

working in the fields, prepping sheds, and packaging houses. This labor force initially comprised largely Chinese immigrants, though after the Chinese Exclusion Act of 1882, the majority of workers who could take the jobs were Japanese immigrants. Closer to, and into the 20th century, Mexican and Mexican-American workers became a more common sight in the area.

In the latter half of the 20th century, urban and industrial expansion in the project area region has resulted in the development of much of what was once farmland into more recognizable neighborhoods, sub-divisions, and commercial centers as well as industrial parks. Developments in the vicinity of Interstate 80 have been particularly intensive due to the value provided by the ease of transport of goods along this federal highway.

3.0 REGULATORY FRAMEWORK

3.1 NATIONAL HISTORIC PRESERVATION ACT OF 1966 (16 USC 470)

The National Historic Preservation Act of 1966 (16 USC 470), enacted in 1966, declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, state, and local levels. The NHPA authorized the expansion and maintenance of the NRHP, established the position of State Historic Preservation Officer and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes in preserving their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

3.1.1 Section 106

Section 106 of the NHPA states that federal agencies with direct or indirect jurisdiction over federally funded, assisted, or licensed undertakings must take into account the effect of the undertaking on any historic property that is included in or eligible for inclusion in the NRHP, and that the ACHP must be afforded an opportunity to comment on such undertakings through a process outlined in 36 CFR Part 800. The Section 106 process involves the identification of historic properties within the APE; the determination of whether the undertaking will cause an adverse effect on historic properties; and the resolution of those adverse effects through consultation with parties to the Section 106 review process, most prominently including the California State Historic Preservation Officer (SHPO) and Native American tribes.

3.1.2 National Register of Historic Places

The National Register was authorized by Section 101 of the NHPA as the nation's official list of cultural resources worthy of preservation. Properties listed in the National Register consist of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. Properties listed in or eligible for listing in the National Register are considered in planning and environmental review, and effects to such properties are primarily addressed under Section 106.

The criteria for determining a resource's eligibility for National Register listing are defined at 36 CFR Part 60.4 and are as follows:

. . .the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

A) That are associated with events that have made a significant contribution to the broad patterns of our history; or

B) That are associated with the lives of persons significant in our past; or

C) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D) That have yielded, or may be likely to yield, information important in prehistory or history.

Under Criteria A, B, and C, the National Register places an emphasis on a resource appearing as it did during its period of significance to convey historical significance; under Criterion D, properties convey significance through the information they contain.

National Register Bulletin *How to Apply the National Register Criteria for Evaluation* states that in order for a property to qualify for listing in the National Register, it must meet at least one of the National Register criteria by (1) being associated with an important historic context, *and* (2) retaining historic integrity of those features necessary to convey its significance (National Park Service 1997). The historic context of a resource will define the theme(s), geographical limits, and period of significance by which to evaluate a resource's significance (National Park Service 1997:7).

Generally, cultural properties must be 50 years of age or more to be eligible for listing in the National Register. According to the National Park Service (1997:2), "properties that have achieved significance within the past 50 years shall not be considered eligible" unless such properties are "of exceptional importance."

3.1.2.1 Historic Integrity

In addition to meeting one or more of the significance criteria, a cultural resource must retain its historic integrity to be considered eligible for listing in the National Register. Historic integrity is defined as the ability of a resource to convey its significance. The evaluation of integrity must be grounded in an understanding of a resource's physical features and its environment, and how these relate to its significance. "The retention of specific aspects of integrity is paramount for a property to convey its significance" (National Park Service 1997:44). There are seven aspects of integrity to consider when evaluating a cultural resource: location, design, setting, materials, workmanship, feeling, and association (National Park Service 1997:44-45).

- *Location* is the place where the historic property was constructed or the place where the historic event occurred. The actual location of a historic property, complemented by its setting, is particularly important in recapturing the sense of historic events and persons.

- *Design* is the combination of elements that create the form, plan, space, structure, and style of a property. Design includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials.

- *Setting* is the physical environment of a historic property. Setting refers to the character of the place in which the property played its historical role. Physical features that constitute the setting of a historic property can be either natural or manmade, including topographic features, vegetation, paths or fences, or relationships between buildings and other features or open space.

- *Materials* are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

- *Workmanship* is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. It is the evidence of the artisan's labor and skill in constructing or altering a building, structure, object, or site.

- *Feeling* is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character.

- *Association* is the direct link between an important historic event or person and a historic property.

For archaeological resources, the term "integrity" is used to describe the level of preservation or quality of information contained within a district, site, or excavated assemblage. Integrity is relative to the specific significance which the resource conveys. Although it is possible to correlate the seven aspects of integrity with standard archaeological site characteristics, those aspects are often unclear for evaluating the ability of an archaeological resource to convey significance under Criterion D. Under Criterion D, the integrity of archaeological resources is judged according to the ability of the site to yield scientific and cultural information that can be used to address important research questions (Little et al. 2000:35-42).

3.1.2.2 Eligibility

Resources that have a significant association with an important historic context, meet the age guidelines, and possess integrity will generally be considered eligible for listing in the National Register.

3.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to CEQA, a historical resource is a resource listed in, or eligible for listing in, the California Register of Historical Resources (CRHR). In addition, resources included in a local register of historic resources, or identified as significant in a local survey conducted in accordance with state guidelines, are also considered historic resources under CEQA, unless a preponderance of the facts demonstrates otherwise. According to CEQA, the fact that a resource is not listed in, or determined eligible for listing in, the CRHR, or is not included in a local register or survey, shall not preclude a Lead Agency, as defined by CEQA, from determining that the resource may be a historic resource as defined in California Public Resources Code (PRC) Section 5024.1.7.

CEQA applies to archaeological resources when (1) the historic or prehistoric archaeological resource satisfies the definition of a historical resource, or (2) the historic or prehistoric archaeological resource satisfies the definition of a "unique archaeological resource." A unique archaeological resource is an

archaeological artifact, object, or site that has a high probability of meeting any of the following criteria (PRC § 21083.2(g)):

1. The archaeological resource contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information.

2. The archaeological resource has a special and particular quality, such as being the oldest of its type or the best available example of its type.

3. The archaeological resource is directly associated with a scientifically-recognized important prehistoric or historic event or person.

3.2.1 California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC § 5024.1(a)). Certain properties, including those listed in or formally determined eligible for listing in the National Register of Historic Places (NRHP) and California Historical Landmarks (CHL), numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historic resources surveys, or designated by local landmarks programs may be nominated for inclusion in the CRHR.

A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria (PRC § 5024.1(c)):

Criterion 1: It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

Criterion 2: It is associated with the lives of persons important in our past.

Criterion 3: It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.

Criterion 4: It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to be recognizable as historic resources and to convey the reasons for their significance. It is possible that a resource whose integrity does not satisfy NRHP criteria may still be eligible for listing in the CRHR. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data. Resources that have achieved significance within the past 50 years also may be eligible for inclusion in the CRHR, provided that enough time has lapsed to obtain a scholarly perspective on the events or individuals associated with the resource.

3.1 CALIFORNIA HEALTH AND SAFETY CODE §7050.5

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined if the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification.

3.2 CALIFORNIA PUBLIC RESOURCES CODE §5097.98

Section 5097.98 of the California Public Resources Code states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Part 7050.5, shall immediately notify those persons (i.e., the Most Likely Descendant or "MLD") it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

4.0 BACKGROUND RESEARCH

HELIX conducted background research of the APE and vicinity to identify cultural resources and the sensitivity for such resources. The background research included a California Historical Resources Information System (CHRIS) records search, a search of the files maintained by the California Native American Heritage Commission, and a review of aerial photographs and historic-era maps. Each source of information, and the results obtained by HELIX, are described below.

4.1 CHRIS RECORDS SEARCH

On December 12, 2024, staff at the Northwest Information Center (NWIC) at Sonoma State University in Rohnert Park, California, conducted a records search for the APE and a 0.25-mile radius. The records search was done to (1) identify prehistoric and historic-era resources within the search radius; (2) determine which portions of the APE have been previously studied; and (3) ascertain the potential for cultural resources and human remains to occur within the APE. The search included a review of USGS archaeological site location maps at the NWIC, resource records, and data from previous studies. The California Points of Historical Interest, California Historical Landmarks, NRHP, CRHR, Office of Historic Preservation (OHP) Archaeological Determinations of Eligibility, Built Environment Resources Directory (BERD), historic-era topographic maps and plat maps, and historic-era aerial photographs were also reviewed.

4.1.1 Previous Studies

The NWIC records search revealed that 25 cultural studies have been conducted within a 0.25-mile radius of the APE, and that eight (8) of those studies at least partially overlapped with the APE. All

studies previously conducted within the 0.25-mile radius are briefly described in Table 1, while the eight studies that at least partially overlap with the APE are discussed below the table.

Table 1
PREVIOUS STUDIES CONDUCTED WITHIN ONE-QUARTER MILE OF THE APE

Report	Year	Author(s)	Title	Includes APE?	Affiliation
S-000106	1974	Fredrickson, David A.	An Archaeological Reconnaissance of the Nut Tree Airport, Vacaville, Solano County, California	Yes	Sonoma State College
S-005156	1965	Treganza, Adan E., Robert L. Edwards, and Thomas F. King	Archaeological Survey and Excavation Along the Tehama-Colusa Canal, Central California	Yes	San Francisco State College
S-018930	1997	Gause, Seana L. S.	An Archaeological Study of Centennial Park, Browns Valley Parkway, Vacaville, Solano County, California	Yes	Info not provided by NWIC
S-027372	2003	Jensen, Peter M.	Archaeological Survey Inventory, Shannon Drive Stormwater Diversion Project, City of Vacaville, Solano County, California	Yes	Info not provided by NWIC
S-034108	2007	McKale, George, Beccah Landman, and Andy Grass	A Cultural and Paleontological Resources Study for the Nut Tree Airport Project, Solano County, California	Yes	LSA Associates, Inc.
S-036141	2009	Whitaker, Adrian and Phil Kaijankoski	Archaeological Survey Report for the PG&E Vacaville Grid Control Center, Allison Road Line, Vacaville, Solano County, California	Yes	Far Western Anthropological Research Group, Inc.
S-045222	2014	Anderson, Katherine	Cultural Resources Inventory and Evaluation Report of the Nut Tree Airport Runway Improvement Project, Solano County, CA	Yes	Environmental Science Associates, Inc.
S-046573	2015	Scheeline, Megan	Archaeological Survey Report for the FI-210 Wildland Fire Cause and Determination Class and Multi-Agency Drill, Vacaville, CA	Yes	California Department of Forestry and Fire Protection
S-005071	1976	Peak, Ann S.	Cultural Resources Assessment of the Jepson Junior High School Expansion Project, Vacaville, California	No	Peak and Associates, Inc.
S-005088	1977	Baumhoff, M. A. and D. L. True	An Archaeological Survey near Vacaville, California: Browns Valley Road, Hoffman Project	No	University of California, Davis

Report	Year	Author(s)	Title	Includes APE?	Affiliation
S-005162	1977	Holman, Miley Paul	Archaeological Reconnaissance of the 352-acre parcel on the northern edge of the City of Vacaville, California	No	Holman & Associates, Inc.
S-026300	2002	Self, William, Kimberly Popetz, and Ward Hill	Historic Property Survey Report, I-80 Nut tree Overcrossing Project, City of Vacaville, Solano County, California (04-SOL-80 KP 28.36) Nut Tree O/C Project EA 44310k	No	Info not provided by NWIC
S-026867	2003	Carpenter, Kim	Archaeological Survey Results for the Markham Heights Congregation Property located at 400 Brown Street, Vacaville	No	Info not provided by NWIC
S-027651	2003	Hill, Ward and Kimberly S. Popetz	Historic Property Survey Report, I-80 Nut Tree Overcrossing Project, City of Vacaville, Solano County, California (04-SOL-80 KP28.36)	No	William Self Associates, Inc.
S-027652	2003	William Self Associates, Inc.	Finding of No Adverse Effect, 1-80 Nut Tree Overcrossing Project, City of Vacaville Solano County, California: 04-SOL 80 KP 28.36 Nut Tree O/C Project EA 443100	No	William Self Associates, Inc.
S-032221	2006	Coleman, Jason A.	Cultural Resources Construction Monitoring Report for the Nut Tree Family Park Project, City of Vacaville, Solano County, California	No	Solano Archaeological Services, Inc.
S-037488	2010	Wills, Carrie D.	Cultural Resources Records Search and Site Visit for T-Mobile West Corporation A Delaware Corporation Candidate BA00371-A (Vacaville), 301 County Airport Road, Vacaville, Solano County, California	No	Michael Brandman Associates, Inc.
S-047648	2016	Webb, Megan, Chad Moffett, and Tim Smith	Cultural Resources Inventory Report Nut Tree Airport Obstruction Removal, Vacaville, Solano County California	No	ECORP Consulting, Inc.
S-048930	2014	Crull, Scott	The History of Archaeology of the Vaca Valley Railroad; the Associated Company Towns and Remnant Landmarks in Solano and Yolo Counties: 1869-1992, Along with the Historical Townsite of the Tancred Colony	No	Info not provided by NWIC

Report	Year	Author(s)	Title	Includes APE?	Affiliation
S-048993	2014	Stevens, Nathan and Jack Meyer	Archaeological Survey Report for the Interstate-80 Express Lanes Project from Red Top Road to I-505 in Solano County	No	Far Western Anthropological Research Group, Inc.
S-050990	2018	Losee, Carolyn	Cultural Resources Investigation for Trileaf 637621 / Verizon SF 371 "Vacaville", 301 County Airport Road, Vacaville, Solano County, CA 95688	No	Archaeological Resources Technology, Trileaf Corporation
S-050990 (supplemental)	2018	Polanco, Julianne, Dena Whitaker, and Carolyn Losee	Crown Castle – SF371 Vacaville/ BU #827724 – Trileaf Project #637621, 301 County Airport Road, Vacaville, CA 95688, Solano County, Allendale Quadrangle.	No	Office of Historic Preservation, Trileaf Corporation, Archaeological Resources Technology
S-051229	2018	Coleman, Jason A.	Cultural Resources Inventory Report, LogistiCenter at Vacaville Project, City of Vacaville, Solano County, California	No	Solano Archaeological Services, Inc.
S-054225	2019	Solano Archaeological Services, Inc.	Cultural Resources Study	No	Solano Archaeological Services, Inc.
S-054931	2018	Roop, William and Katherine F. Roop	A Cultural Resources Evaluation of The Nut Tree Apartments, Three Parcels Within the Nut Tree Development, Vacaville, Solano County, California	No	Archaeological Resource Service, Inc.

Report S-000106 – *An Archaeological Reconnaissance of the Nut Tree Airport, Vacaville, Solano County, California* was written by David A. Fredrickson in 1974. The area examined for Report S-000106 consists of a few smaller survey areas, measuring 69 acres in total, one of which consists of a multi-faceted polygon that clips the southeastern corner of the currently proposed APE. These areas were slated for developments that would improve the Nut Tree Airport. This study consisted of an archaeological survey intended to identify the location, extent, and nature of archaeological resources found within the selected study areas. No cultural resources were encountered over the course of the archaeological survey associated with Report-S-000106.

Report S-005156 – *An Archaeological Survey and Excavation Along the Tehama-Colusa Canal, Central California* was written by Adan E. Treganza, Robert L. Edwards, and Thomas F. King of San Francisco State College in 1965. The survey area for Report S-005156 consisted of a large rectangular area which follows an irrigation ditch some 250 miles along the western side of the Sacramento Valley. This survey area clips the northeastern corner of the currently proposed APE. This study consisted of a pedestrian survey and subsequent testing of any sites found within the canal's anticipated APE. Ultimately, this study identified five Native American Village sites that would be affected by construction of the canal. In addition, the study resulted in the recordation of, and in some cases the test excavations of, 14 additional Native American sites as they were reported to be "in danger of destruction by lateral roads

and other works connected with canal construction." None of these archaeological resources, however, are located within even a 0.5-mile radius of Centennial Park.

Report S-018930 – *An Archaeological Study of Centennial Park, Browns Valley Parkway, Vacaville, Solano County, California* was written by Seana L.S. Gause in 1997. The survey area covered what were, at the time, 76 acres of undeveloped Centennial Park lands, which amount to the southern half of the currently proposed APE. This cultural resources study included background research conducted at the NWIC, and a pedestrian survey of the report's study area. The report's records search revealed that no archaeological sites had been previously located within its study area. The pedestrian survey associated with report S-018930 employed 10- to 35-meter wide transects. No cultural resources were identified through either the background research or the pedestrian survey associated with this report.

Report S-027372 – *Archaeological Inventory Survey, Shannon Drive Stormwater Diversion Project, City of Vacaville, Solano County, California* was written by Peter M. Jensen in 2003. The report details a cultural resources inventory of a small, approximately 5-acre, rectangular survey area which lies just inside the western boundary line of the central portion of the currently proposed APE. The investigation associated with Report S-027372 consisted of a records search at the NWIC, and a pedestrian survey of the report's study area. No cultural resources were encountered during the research associated with Report S-027372.

Report S-034108 – *A Cultural and Paleontological Resources Study for the Nut Tree Airport Project, Solano County, California,* was written by George McKale, Beccah Landman, and Andy Grass of LSA Associates, Inc. in 2007. This study was prepared to advise airport managers as any cultural resource concerns within land that might be acquired to protect approaches to the runway and to provide land for future aviation development. The cultural resources study associated with Report S-034108 consisted of background research conducted at the NWIC, consultation with potentially interested parties, subsurface sensitivity assessment, and a field survey of the project area. These efforts identified one previously recorded cultural resource, a historic-era architectural structure, which has been determined eligible for the National Register of Historic Places. This resource is located within 0.5 mile of the current APE; however, due to its distance from the current APE, this resource will not be impacted by the currently proposed project.

Report S-036141 – *Archaeological Survey Report for the PG&E Vacaville Grid Control Center, Allison Road Line, Vacaville, Solano County*, California was written by Adrian Whitaker and Phil Kaijankoski of Far Western Anthropological Research Group in 2009. This report was intended to investigate the area that would be impacted by a Pacific Gas and Electric Company (PG&E) underground power conduit located along Allison Road and underneath a gravel road which connects Allison Road and Allison Parkway. The cultural investigation associated with report S-036141 consisted of an archival records search, Native American consultation, geoarchaeological sensitivity study, and a pedestrian survey along an approximately two-mile corridor which formed the APE for the proposed PG&E project. The records search associated with this effort identified one known cultural resource, resource P-48-000560, the Nut Tree Property, which is located to the east of the currently proposed APE, but no new cultural resources were identified through the pedestrian survey associated with report S-036141.

Report S-045222 – *Cultural Resources Inventory and Evaluation Report of the Nut Tree Airport Runway Improvement Project, Solano County, CA*, was written by Katherine Anderson of ESA in 2014. This cultural investigation was undertaken to assess any cultural resources that might be impacted by a proposed Nut Tree Airport improvement project to shift Runway 2/20 200 ft to the north to meet FAA

Runway Object Free Area standards, to add a 450-foot extension onto Taxiway B to the west of Runway 20, and the realignment or relocation of associated runway and taxiway lighting and other Navigation Aids at the airport. The cultural study included a records search at the NWIC, a Sacred Lands File Search with the Native American Heritage Commission, and a pedestrian survey of the report's study area. These efforts resulted in the identification of one potential historic resource within the boundaries of the proposed improvements, the Nut Tree Airport Runway (P-48-000064/CA-SOL-484H), however, this resource was ultimately recommended as ineligible for listing in either the California Register of Historical Places and the National Register of Historic Places. This resource is not anticipated to be impacted by the currently proposed project. No other resources were identified through the efforts associated with report S-045222.

Report S-046573 – *Archaeological Survey Repot for the FI-210 Wildland Fire Cause and Determination Class and Multi-Agency Drill, Vacaville, CA*, was written by Megan Scheeline on behalf of the California Department of Forestry and Fire Protection in 2015. This report was written to support the California Department of Forestry and Fire Protection (CAL FIRE) in their pursuit of prescribed burning activities on 87 acres owned by the City of Vacaville, which lies to the south adjacent of the currently proposed APE and to the north of Interstate 80. The cultural resource study associated with report S-046573 consisted of a records search at the NWIC, Native American Consultation, and a pedestrian survey of the prescribed treatment area. No archaeological resources were found within the treatment area over the course of the study.

4.1.2 Previously Recorded Resources

The NWIC records search revealed that ten (10) cultural resources have been previously recorded within a 0.25-mile radius of the APE, one of which has been reported by the NWIC as lying within the APE. The resource reported as lying within the currently proposed APE consists of a segment of the Vaca Valley Railroad (P-48-001025). The additional resources within the project vicinity consist of historic-era resources, include the Nut Tree Ranch (P-48-00560), landscaped vegetation (P-48-000957), canals/aqueducts or other water management features (P-48-000961, P-48-000963, and P-48-002013), dairy farm related structure pads (P-48-000962), the Nut Tree Airport (P-48-000964), the Nut Tree Cistern (P-48-002007), and the remains of a Nut Tree Tower Sign (P-48-002008). The nine previously recorded resources within 0.25 mile of the APE are described briefly in Table 2 below, while the lone resource reported as lying within the currently proposed APE is discussed briefly below the table.

Table 2
PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN ONE-QUARTER MILE OF THE APE

Primary	Trinomial	Year of Most Recent Examination	Recorder	Description	Within APE?
P-48-001025	N/A	2017	M. Webb	Historic Era- Vaca Valley RR Route/Southern Pacific RR/Vaca Valley & Clear Lake RR/Union Pacific/Vaca Valley RR Route/Vaca Valley Railroad Grade, district including roads/trails/railroad grades, single family property,	Yes

Primary	Trinomial	Year of Most Recent Examination	Recorder	Description	Within APE?
				engineering structure, railroad depot, bridge, farm/ranch, unreinforced masonry building	
P-48-000560	N/A	2002	W. Hill	Historic Era – Nut Tree property/Harbison House, Single Family Property, 1-3 story commercial building, and Farm/ranch	No
P-48-000957	N/A	2012	Scott Baxter	Historic Era – English Walnut Trees, landscaping/orchard	No
P-48-000961	CA-SOL-000481H	2012	Scott Baxter	Historic Era – field name NT-5, canal/aqueduct	No
P-48-000962	CA-SOL-000482H	2012	Scott Baxter	Historic Era – Steiner Dairy field name NT-6, foundations/structure pads	No
P-48-000963	CA-SOL-000483H	2012	Scott Baxter	Historic Era- Pine Tree Creek field name NT-8, canal/aqueduct	No
P-48-000964	CA-SOL-000484H	2012	Scott Baxter	Historic Era- Nut Tree Airport field name NT-9, engineering structure	No
P-48-002007	N/A	2018	William Roop	Historic Era- Nut Tree Cistern	No
P-48-002008	N/A	2019	Pinon, Andrew Von and William G. Roop	Historic Era- Nut Tree Tower Sign Remains	No
P-48-002013	CA-SOL-000527H	2019	J. Coleman and M. Rives	Historic Era- SAS-001 ditch	No

Resource P-48-001025 – Over the years, this historic-era railroad has gone by several names including Vaca Valley Railroad (1870-1877), Southern Pacific Railroad (1886-1957), the Vaca Valley & Clear Lake Railroad (1878-1886), and the Union Pacific Railroad (1957-1992). Segments of the resource were most recently recorded by M. Webb of ECORP Consulting in 2017, but this resource was first formally recorded by Dr. Scott Crull, PhD, RPA in 2014. Crull recommended that portions of the broader reaches of the railroad and its associated railroad grade, depots, bridge, and related ancillary structures and company towns, could be considered as contributing elements to the Vaca Valley Railroad Road Route District (P-57-000715).

The original Vaca Valley RR (1870-1877) ran from Elmira to Vacaville. In 1878, the line was acquired and renamed the Vaca Valley & Clear Lake Railroad (1878-1886) and track was laid to Rumsey, leading to the development of several company towns along the path. In 1886, the Southern Pacific's Northern Railroad Division bought the line and operated it until 1957, though the line extension from Capay to Rumsey stopped service in 1934, and the tracks were removed in 1937. Capay to Esparto service ended as of 1941, and the tracks were removed by 1944. Service continued from Elmira to Esparto up until 1957, and the tracks were removed from Vacaville to Esparto around 1975. The Elmira to Vacaville Line

was operated by the Union Pacific Railroad up until 1992, and the tracks were finally removed around 1995. In some locations along the resource's length, the railroad grade is visible, however, this grade is not the typical grade commonly seen for railroads in Northern California. Throughout its history there were no ballast rocks laid under the tracks along any portion of the route. Instead, the ground was hand-flattened/packed, and the rails were fixed to wooden ties laying on the bare ground (Crull 2014).

According to records on file with the NWIC, a segment of resource P-48-001025 extends along (and within) the western boundary of the currently proposed APE. As a result, the re-location and examination of this segment of resource P-48-001025 was a focal point of HELIX's pedestrian survey of the APE.

4.1.3 Historic Map and Historic Aerial Photograph Analysis

HELIX staff examined historic-era maps and historic-era aerial photographs of the APE and its immediate vicinity to better understand historic-era development of the APE. Historic-era maps reviewed for this purpose included: an 1857 US Surveyor General Plat map of the Rancho Los Putos Land Grant, a Thomas Brothers Map of Solano County from 1946, a C. F. Webber and Company Map of Napa and Solano Counties from 1914, and USGS 15-minute series quadrangle maps for Vacaville from both 1908 and 1953. The only information gleaned from these maps pertaining to the currently proposed APE stemmed from the USGS *Vacaville*, *Calif.* 15-minute topographic map from 1953, which revealed the presence of a sewage disposal facility within the southern third of what today is Centennial Park. This map also showed the existence of Browns Valley Road along the southern and southwestern boundary of the APE, and the presence of drainages which traverse the park's APE, generally cutting across the park area from the northwest to the southeast. The USGS *Vacaville*, *Calif.* 15-minute topographic map from 1953, nor did not however, depict the landfill area in the southwestern corner of the APE which is known to have been in use during the mid-to late 20th century (Hew Hesterman, Park Planner for the City of Vacaville, pers comms. 4/3/24).

Analysis of the aerial photograph series included an examination of photographs dating from 1957, 1968, 1984, 1903, 2005, 2009, 2010, 2014, 2016, 2018, and 2020 (NETROnline 2024). Review of this photograph series indicated that the Centennial Park area was in agricultural use as of 1957, with ploughed tracts visible within the southern and central portions of park. It is also clear that large portions of the southern third of the park area were once used as a sewage disposal area (southeast corner of park area), with fields developed to retain and reabsorb treated wastewater, and as a landfill (southwest corner of park area) with this portion of land showing a network of dirt roads and refuse disposal areas in the 1957 aerial photograph. The roadway of Browns Valley Highway is also extant by 1957, and the areas to either side of this roadway appear to be in agricultural use, with the 1957 photograph revealing rows of crops on some parcels adjacent to the road, and land obviously cleared of trees in advance of agricultural development. As of the 1968 photograph, agricultural activity within the park area had intensified, with more clearly defined boundaries, formed by dirt access/maintenance roads, for parcels within the southern third of the currently proposed APE. Just outside of the APE, additional developments are also clear, including the construction of a housing development to the southwest of the park, and the apparent construction of the Nut Tree Airport paved runway, additional airport roadways, and ancillary structures. The aerial photograph from 1984 depicts significant vegetation growth in the areas once used as a sewage disposal area and landfill, suggesting that that both of these forms of land use had subsidized by the mid-1980s. The historic-era aerial photograph series also reveals an intensification of development in the project vicinity between 1984 and 1993. Sometime within that date range, the large residential developments adjacent to the west of Centennial

Park were built, and the industrial park to the northeast of the park was constructed. Furthermore, additional ancillary and maintenance structures were added to the Nut Tree Airport east of the park. The photograph series between 1993 and 2005 show significant improvements to the southern third of Centennial Park itself, including the development of baseball diamonds, soccer fields, associated ancillary structures, and parking lots, and the more deliberate landscaping of the park's open fields. The aerial photograph from 2005 revealed that additional residential housing development took place in the adjacent parcels to the west of the southern third of Centennial Park sometime between 1993 and 2005. No significant changes to the APE and its surrounding environs were noted in the historic-era aerial photographs taken between 2005 and 2020 (NETROnline 2024).

Ultimately, the historic map and historic aerial photograph analysis of the APE revealed that the southern third of Centennial Park was used as a sewage disposal area and landfill in the mid-20th century and that development in the vicinity of the park (residential to the west and south, industrial to the north, and airport related to the east), as well as within the park itself, took place in the later portion of the 20th century.

4.2 NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH

On January 12, 2024, HELIX requested that the NAHC conduct a search of their Sacred Lands File (SLF) for the presence of Native American sacred sites or human remains in the vicinity of the APE. A written response received from the NAHC on February 5, 2024, stated that the results of the SLF search were negative. On February 23, 2024, HELIX sent letters to twelve (12) Native American contacts that were recommended by the NAHC as potential sources of information related to cultural resources in the vicinity of the project area. These Native American contacts included:

- Jennie Mitchum, Cultural Preservation Director, Cachil Dehe Band of Wintun Indians of the Colusa Indian Community
- Wayne Mitchum Jr., Chairman, Cachil Dehe Band of Wintun Indians of the Colusa Indian Community
- Charlie Wright, Chairperson, Cortina Rancheria – Kletsel Dehe Band of Wintun Indians
- Michael Derry, Historian, Guidiville Rancheria of California
- Bunny Tarin, Tribal Administrator, Guidiville Rancheria of California
- Dahlton Brown, Executive Director of Administration, Wilton Rancheria
- Herbert Griffin, Executive Director of Cultural Preservation, Wilton Rancheria
- Representative of Cultural Preservation Department, Wilton Rancheria
- James Kinter, Tribal Secretary, Yocha Dehe Wintun Nation
- Yvonne Perkins, Tribal Historic Preservation Officer and Cultural Resources Chairman, Yocha Dehe Wintun Nation

- Anthony Roberts, Chairperson, Yocha Dehe Wintun Nation
- Leland Kinter, Tribal Treasurer, Yocha Dehe Wintun Nation

The Yocha Dehe Wintun Nation responded to HELIX's letter and requested AB 52 consultation with the City of Vacaville. The City sent a follow up email on April 3, 2024, to the Yocha Dehe Wintun Nation to coordinate a consultation under AB 52. As of the date of this report, no other responses have been received from these Native American contacts. The initial correspondence with the NAHC and a representative outreach letter sent out to the 12 identified points of tribal contact are included in Appendix C of this report.

5.0 PEDESTRIAN SURVEY

HELIX archaeologist Jentin Joe surveyed the APE between January 23 and 30, 2024. A single day of additional survey was conducted by HELIX staff on May 1, 2024. These survey efforts were conducted under the direction of HELIX Senior Archaeologist Ben Siegel, RPA. The pedestrian survey involved the systematic investigation of the APE's ground surface by walking in parallel 15-meter transects. During the pedestrian survey, the ground surface was examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, fire-affected rock, prehistoric ceramics), soil discoloration that might indicate the presence of a prehistoric cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations, wells) or historic-era debris (e.g., metal, glass, ceramics). Ground disturbances such as landscape modifications and cut banks were also visually inspected. Representative survey photographs are found in Appendix D.

During the course of the survey, ground surface visibility ranged between low (20%) and moderate (60%). These conditions were a result of recent heavy rains, which caused many of the fields within the APE to possess either thick grass or pools of water (Photograph 1 representative photographs are in Appendix D). Vegetation which obscured the surveyors view of the ground surface was most notable in the northwestern most portion of the APE where dense dry husks of tall grasses, which stood approximately 5 ft tall, prevented the surveyor from meaningfully examining the ground surface (Photograph 2). The survey area itself mainly consists of large, relatively flat fields that extend throughout the APE, and exposed soils found throughout the surveyed area were found to consist of a brown loam.

The southern third of the APE was characterized by landscaped and maintained baseball diamonds, soccer fields, and a dog park, as well as paved parking lots, walkways, tennis courts, and ancillary structures associated with park's sports fields. The southern third of the APE was also found to contain a large contingent of discarded concrete and asphalt rubble (Photograph 3). These debris piles, however, do not appear to be related to any previously standing structures on site, as no traces of leveled structures were found throughout the APE. The central and northern thirds of the APE proved to be characterized by grass fields segmented by a few paved and dirt walkways that extend to other portions of the park.

Three prominent drainages were also noted within the APE, which had dense vegetation along their banks that reduced ground surface visibility in those areas. Within the southern third of the APE, there is an approximately 20-foot-wide drainage that runs east-to-west along the southern edge of the park and borders the eastern portion of Browns Valley Parkway. Within the central portion of the APE is another

approximately 10-foot-wide drainage, which runs from east-to-west along the length of the APE. Lastly, within the northern third of the APE, a large drainage runs from the northwest to the northeast before exiting the park. This drainage is approximately 10 feet wide (Photograph 4) and surrounded on either bank by riparian vegetation.

During the pedestrian survey, HELIX staff made a concerted effort to examine the reported location of resource P-48-001025 (the Vaca Valley/Southern Pacific Railroad), which suggested that a segment of resource P-48-001025 extends along (and within) the western boundary of the currently proposed APE. HELIX's surveyor examined the entirety of the NWIC's indicated location of this resource within the currently proposed APE and found no traces of the railroad alignment. No raised berm or railroad bed/grade were found nor were any railway ties or associated metal or wooden debris. Instead, HELIX's surveyor observed that a paved walkway/bike path associated with Centennial Park now occupies resource P-48-001025's reported alignment through the currently proposed APE (Photographs 5 and 6). In some locations, this paved walkway/bike path was found to abut residential neighborhoods to the west. In sum, no traces of resource P-48-001025 were found during HELIX's survey of the APE.

In speaking with Hew Hesterman, Park Planner for the City of Vacaville, who was on site to walk the NWIC reported location of the railroad segment with HELIX's surveyor, it was learned that the entirety of the railroad tracks were removed in 2006 for the purpose of the installation of the now extant paved walkway/bike path (Hew Hesterman pers comms 5/1/24). In light of this information and the results of HELIX's pedestrian survey, HELIX staff prepared a Department of Parks and Recreation (DPR) 523I – Continuation Sheet/Site Update form for resource P-48-001025 to note the absence of this resource within the boundaries of the currently proposed APE and recommend the segment of this resource reported as lying within the currently proposed APE as ineligible for listing in the NRHP or CRHR on the grounds that it does not retain integrity to its period of historic significance. Further, HELIX recommends that this segment of the railway should also not be considered a contributing element to the Vaca Valley Railroad Route District (P-57-000715). Completed DPR forms pertaining to resource P-48-001025 can be found in Appendix E of this report.

Ultimately, the APE was thoroughly inspected during HELIX's pedestrian survey, and no prehistoric or historic-era cultural materials or features were observed.

6.0 SUMMARY AND RECOMMENDATIONS

6.1 SUMMARY

HELIX conducted this CRA to assist the City of Vacaville in addressing the requirements of CEQA and Section 106 of the NHPA as pertains to the Centennial Park Master Plan Project. The CRA was prepared based on background research, Native American outreach, and a field survey.

Based on the results of this CRA, HELIX concludes that the following findings are appropriate for the project:

- ***No Significant Impact*** to Historical or Unique Archaeological Resources under CEQA Guidelines Section 15064.5;

- ***No Historic Properties Affected*** under Section 106 (36 CFR Part 800.4(d)(1)); and,

- ***No Significant Impact to Human Remains*** resulting from disturbance.

No additional study or documentation for cultural resources are recommended at this time. However, in the unlikely event that archaeological cultural resources, and/or human remains, or funerary objects are discovered during project construction, the provisions contained in Section 6.2 of this report should be implemented to avoid or substantially reduce the severity of impacts to such finds.

6.2 RECOMMENDATIONS

6.2.1 Accidental Discovery of Cultural Resources

In the event that cultural resources are exposed during ground-disturbing activities, construction activities should be halted within 100 feet of the discovery. Cultural resources could consist of but are not limited to stone, bone, wood, or shell artifacts, or features, including hearths, structural remains, or historic dumpsites. If the resources cannot be avoided during the remainder of construction, the retained archaeologist, who meets the Secretary of the Interior's *Professional Qualifications Standards*, should assess the resource and provide appropriate management recommendations. If the discovery proves to be CRHR- or NRHP-eligible, additional documentation and analysis, such as data recovery excavation, may be warranted.

6.2.2 Accidental Discovery of Human Remains

Although considered highly unlikely, there is always the possibility that ground-disturbing activities during construction may uncover previously unknown human remains. In the event of an accidental discovery or recognition of any human remains, PRC Section 5097.98 must be followed. Once project-related earthmoving begins and if there is a discovery or recognition of human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the specific location or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains are Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in PRC Section 5097.98, or

2. Where the following conditions occur, the landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendent or on the project area in a location not subject to further subsurface disturbance:

    - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission;

    - The descendent identified fails to make a recommendation; or

- The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

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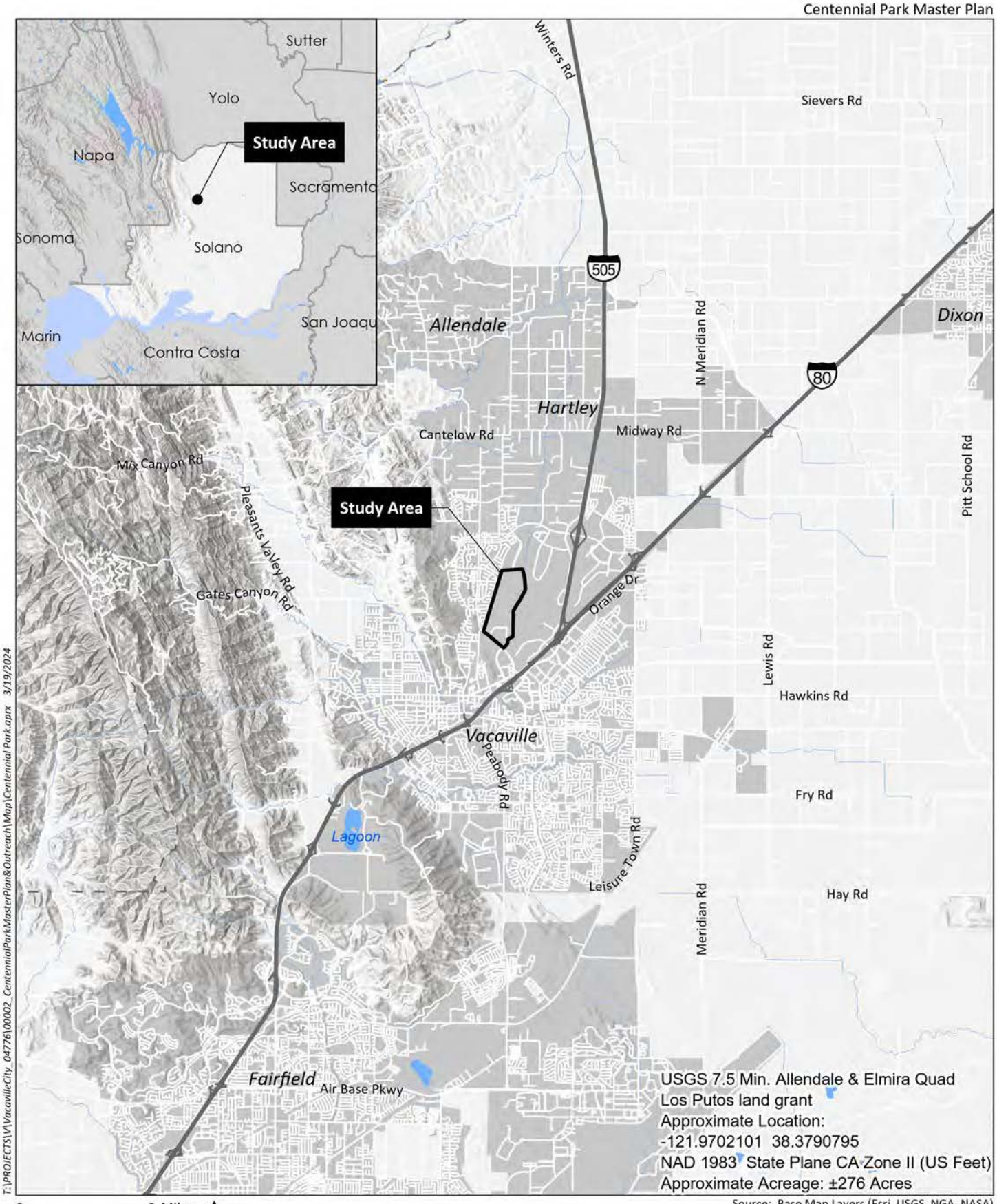
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Appendix A

Figures

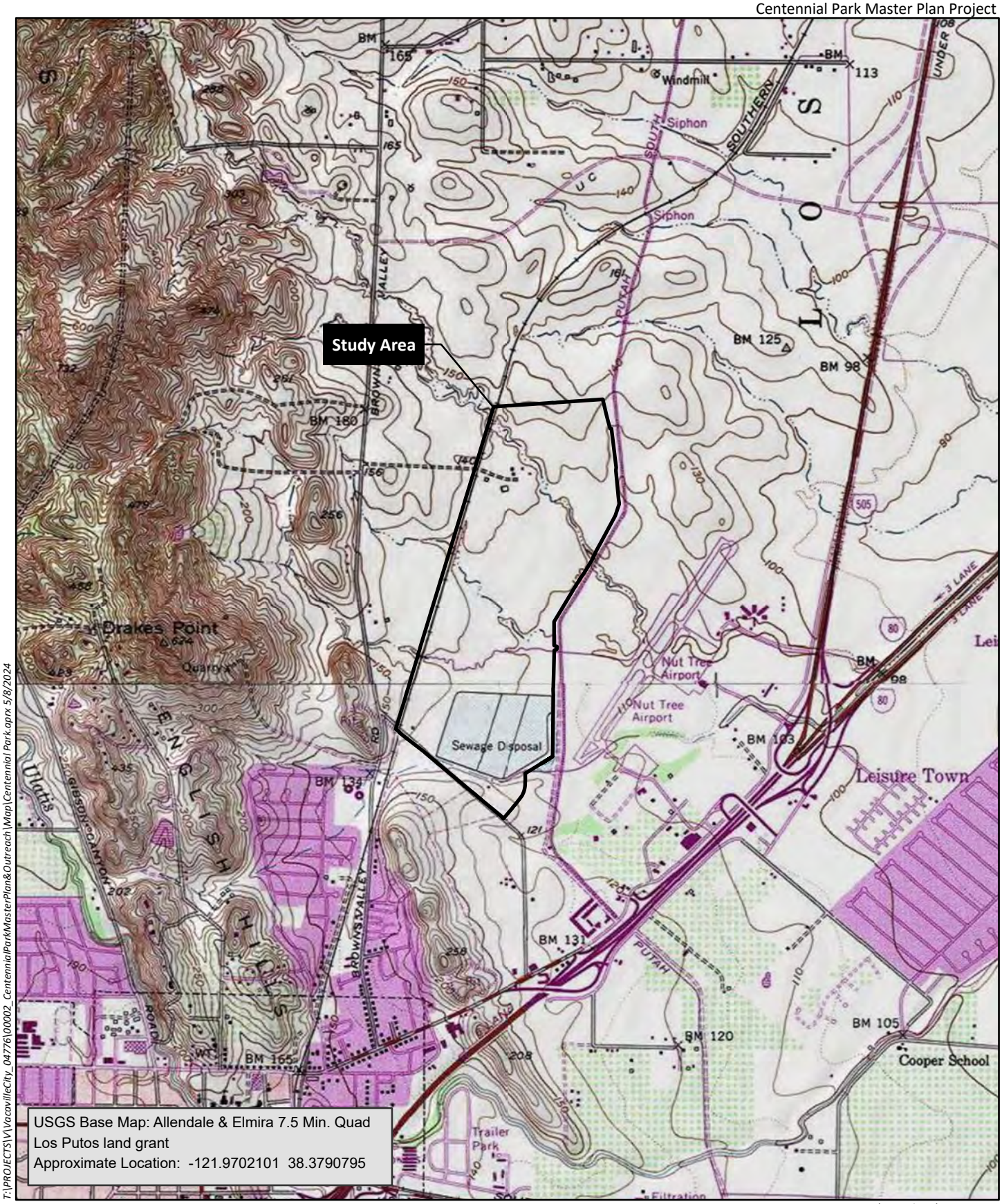


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HELIX Environmental Planning

Site and Vicinity Map

Figure 1



HELIX Environmental Planning

Project Location Map

Figure 2



Source: Aerial (Maxar, 7/23/2022)

HELIX Environmental Planning

Area of Potential Effect Map

Figure 3

Appendix B

Resumes of Cultural Resources Staff

BENJAMIN SIEGEL, RPA

Cultural Resources Project Manager

EDUCATION

Doctor of Philosophy Candidate, Anthropology, University of California, Berkeley, 2024

Master of Arts, Anthropology, University of California, Berkeley, 2019

Master of Arts, Maritime Studies and Nautical Archaeology, East Carolina University, 2011

Master of Arts, American History, Emory University, 2007

Bachelor of Arts, History, Cum Laude, Emory University, 2007

CERTIFICATIONS

Registered Professional Archaeologist, No. 989542

U.S. SOI Qualified for Historic Archaeology, Prehistoric Archaeology, and History

PROFESSIONAL AFFILIATIONS

Society for Historical Archaeology



Mr. Siegel is an archaeologist and cultural resource manager with 14 years of experience directing cultural resource management efforts across the United States and in countries abroad. He regularly authors or co-authors cultural resource assessments and reports associated with projects requiring compliance with Section 106 of the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA). He has applicable experience in directing records searches, field surveys, site evaluations, data recovery efforts, and developing resource mitigation plans for large scale cultural resource efforts. Mr. Siegel is also experienced in the application of the California Register of Historical Resources (CRHR) and National Register of Historic Places (NRHP) evaluation criteria to various cultural resources. He meets the Secretary of the Interior's (SOI) Professional Qualifications Standards for prehistoric archaeology, historic archaeology, and history and is a member of the Register of Professional Archaeologists.

Social and Ecological Resilience Across the Landscape Fire Management Features Cultural Resources (2021 - 2022). Senior Archeologist managing a fuel break expansion project extending through Stanislaus National Forest lands. Cultural resources studies included Section 106 compliance with the Stanislaus National Forest as the lead agency, and CEQA compliance with the County of Tuolumne as the lead agency. Project activities managed included leading intensive pedestrian surveys of fuel break areas totaling approximately 8,500 acres, documenting over 100 cultural resources using California DPR 523 site recordation forms and following Stanislaus National Forest protocols, developing avoidance and minimization strategies for at-risk cultural resources, and producing a comprehensive Cultural Resources Inventory Report. Work performed for the County of Tuolumne with the U.S. Forest Service as project partners.

West Point Water Supply Drought Resiliency Biological and Cultural Resource Evaluations (2022). Senior Archaeologist for a dam enhancement project, approximately four acres in size, located in West Point, Calaveras County. Responsible for conducting a California Historical Resources Information System (CHRIS) records search and leading a pedestrian survey of the project area. Author of a cultural resource assessment that meets with CEQA and Section 106 requirements. Work performed for Calaveras County Water District.

Forebay Park Improvements (2022). Senior Archaeologist for proposed recreation improvements to the approximately six-acre Forebay Park located in Pollock Pines, El Dorado County. Responsible for conducting a California Historical Resources Information System (CHRIS) records search, Native American outreach, and directing a pedestrian survey of the project area. Author of the project's cultural resource assessment which meets with CEQA requirements. Work performed for El Dorado County.

North Vista Plaza Project (2021 - 2022). Senior Archaeologist for an approximately 41-acre residential development project in Valley Springs, Calaveras County. Responsible for California Historical Resources Information System (CHRIS) records search and Native American Heritage Commission Sacred Lands File. Directed the pedestrian survey of the project area. Authored the cultural resource technical report to comply with USACE and Section 106 of the National Historic Preservation Act. Work performed for LGI Homes.

Orleans Mutual Water Company, Water Treatment and Storage Improvements IS/MND (2022). Senor Archaeologist for replacement of an existing in-line filtration plant and water distribution system with a new water treatment plant system and storage in unincorporated Orleans, Humboldt County. Prepared cultural resources assessment in support of CEQA IS/MND. Work performed as a subconsultant to Water Works Engineers with Orleans Mutual Water Company as the project owner, and State Water Resources Control Board as the lead agency.

Creekside Ridge Drive Development Cultural Extended Phase I Plan & Letter Reports (2021). Senior Archaeologist for approximately two-acre developmental project located in Roseville, Placer County. Responsible for developing and planning an Extended Phase I archaeological study based on previous cultural resource efforts in the project vicinity and for the proposed development project. Work performed for RSC Engineering, Inc. with the City of Roseville as the lead agency.

Mowry Village Residential Development (2021). Senior Archaeologist responsible for conducting a California Historical Resources Information System (CHRIS) records search, historic aerial photograph analysis, tribal outreach, and an intensive pedestrian survey to inform a cultural resource assessment of a 35-acre project area in the City of Newark in Alameda County. The project site had a high potential to contain prehistoric archaeological sites and resources. Served as the primary author for the final cultural resource assessment report for the project to comply with CEQA requirements for the management of cultural resources. Work performed for Integral Communities.

Folsom Corporate Center Apartments IS/MND (2021). Senior Archaeologist for proposed multi-family apartment community project approximately seven acres in size, in Folsom, Sacramento County. Responsible for conducting a California Historical Resources Information System (CHRIS) records search, Native American outreach, and directing a pedestrian survey of the project area. Author of the project's cultural resource assessment which meet with CEQA requirements. Work performed for the City of Folsom Community Development Department.

Natoma Senior Apartments IS/MND (2022). Senior Archaeologist for proposed senior apartment housing project approximately five acres in size, in Folsom, Sacramento County. Responsible for conducting a California Historical Resources Information System (CHRIS) records search, Native American outreach, and directing a pedestrian survey of the project area. Author of a cultural resource assessment that meets with CEQA and Section 106 requirements. Work performed for City of Folsom Community Development Department.

Fred Jackson First Mile/Last Mile Connection Environmental Compliance (2021). Senior Archaeologist for construction monitoring during roadway improvement project located in unincorporated community of North Richmond, Contra Costa County. Responsible for California Historical Resources Information System records search, Native American Heritage Commission Sacred Lands File search, technical cultural report authorship, and for the development of a Worker Environmental Awareness Program training for project construction crews and contractors before excavation and ground disturbance activities. Work performed for Contra Costa County.

Watt Avenue Apartments (2021). Senior Archaeologist for seven-acre apartment complex development project located in North Highlands, Sacramento County. Responsible for producing the Cultural Resource Assessments associated with CEQA and Section 106 compliance. Work performed for New Green Properties, LLC.

Jentin Joe

Staff Archaeologist

HELIX Environmental Planning

Summary of Qualifications



Mr. Joe has experience with large monitoring, survey, and excavation projects throughout California. He has participated in the full range of projects involving survey, testing, laboratory analysis, and technical report writing. Mr. Joe has completed various types of field surveys, including block, linear, and reconnaissance surveys. Mr. Joe has authored numerous reports and completed documentation for a variety of telecom projects and archaeological site record forms. He has worked as an archaeological monitor for multiple projects, which required keeping daily monitoring logs annotated with project photographs. He has worked closely with Native American monitors and has a good working relationship with construction crews and other project personnel. Mr. Joe is also experienced in Geographic Information Systems (GIS) and has experience with Trimble and Garmin devices.

Education

Bachelor of Arts, Anthropology, University of California, Davis, 2018

Associate of Arts, Associate of Sciences, Associate of Anthropology, American River College, 2016

Selected Project Experience

El Dorado County Bike Park (2019 - Present). Conducted an archaeological survey for a bike path project tasked with characterizing cultural resource impacts by construction and operation of the El Dorado County Bike Park. The project included ground-disturbing activities associated with land modifications to accommodate the installation of bike tracks, tricks and jumps, and associated recreational facilities. The project was conducted for El Dorado County who was also the Lead Agency.

Scholar Way Adult Living Project (2020 - Present). Conducted a pedestrian survey to characterize any prehistoric or historic-era archaeological resources located within the project site. The survey consisted of a pedestrian walk-over of the approximately 4.2-acre project site in parallel transects spaced at 10-meter intervals. During the survey, the ground surface was examined for the presence of historic-era artifacts (e.g., metal, glass, ceramics), prehistoric artifacts (e.g., flaked stone tools, tool-making debris), and other features that might represent human activity more than 50 years ago. Two known archaeological sites were observed during the survey, and no new cultural resources were found. Work was done for the City of Folsom, who was also the Lead Agency.

South Bay Salt Pond Restoration Project, Eden Landing Phase 2 (2020 - Present). Archaeological technician for a survey of the South Bay salt ponds. The project consisted of two parcels totaling over 20 acres within the South Bay. The work was conducted for Ducks Unlimited.

Tuolumne County Fuel Break Expansion Activities (2019 - Present). Cultural Resources Project Field Director for a fuel break expansion project in Tuolumne County proposing the development of seven fuel breaks under the Forest and Watershed Health aspect of the Community and Watershed Resilience Program

(CWRP). Supervised cultural resource surveys, site record completion, and site visits for the project on lands administered by the Stanislaus National Forest, the Bureau of Land Management (BLM), and private lands. Work performed for the State of California Department of Housing and Community Development with the U.S. Forest Service and BLM as project partners.

Hidden Valley Lake Dredging Project (2019). Work included monitoring construction activities in multiple locations, addressing unanticipated discoveries during monitoring, keeping daily logs, and co-authoring the final report. Work was performed for Northwest Biological Consulting.

Hidden Valley Restaurant Project (2020 - Present). Archaeological technician for sub-surface testing at the Hidden Valley Lake golf course. The project consisted of trench testing for archaeological resources within an approximately 5-acre project area. The work was conducted for the HOA of Hidden Valley Lake.

Hwy 89 Almaden -SJWC Willow Glen - 6120001170 (2020 - Present). Archaeological monitor for a cell tower installation within the city of San Jose. Work was performed as a subcontractor to Bothwell Construction within a less than 5-acre lease area with the City of San Jose as the lead agency.

RE Slate Solar (2020 - Present). Conducted subsurface testing at site HELIX-004 for the RE Slate Solar Project (project) in Kings County, California. The Santa Rosa Rancheria Taki Yokut Tribe (Tribe) requested that subsurface presence/absence testing be conducted in the westernmost portion of a ~2,400 project site. HELIX conducted the subsurface testing on July 1, 2020, with negative results.

UC Davis Archaeological Field School Projects (2017). Field Technician participating in data collection, recording, survey, and excavation in the Sierra Nevada mountains. Tasks included understanding the chronology of settlement patterns in the region and how various factors such as topography and availability influenced site type and location.

EAS - 2020 (2020 - Present). Archaeologist for various telecommunications projects across California that require record searches, map reviews, field surveys, historic building and ground disturbance evaluations, and compliance reports for State Historic Preservation Officer (SHPO) submittal. Work conducted as a consultant for EAS, Inc. with the Federal Communications Commission (FCC) as the lead agency.

EBI - 2020 (2020 - Present). Archaeologist for ongoing telecommunications projects throughout northern California. Projects require record searches, map reviews, field surveys, historic building and ground disturbance evaluations, and compliance reports for State Historic Preservation Officer (SHPO) submittal. Work conducted as a consultant for EBI with the Federal Communications Commission (FCC) as the lead agency.

Extenet - 2020 (2020 - Present). Archaeologist for telecommunications projects throughout California requiring record searches, map reviews, historic building and ground disturbance evaluations, and compliance reports for State Historic Preservation Officer (SHPO) submittal. Work conducted as a consultant for ExteNet Systems with the Federal Communications Commission (FCC) as the lead agency.

Appendix C

Native American Correspondence

Sacred Lands File & Native American Contacts List Request

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

Information Below is Required for a Sacred Lands File Search

Project: Centennial Park Master Plan Project

County: Solano

USGS Quadrangle Name: Allendale & Elmira

Township: N/A **Range:** N/A **Section(s):** N/A Within Los Putos Land Grant

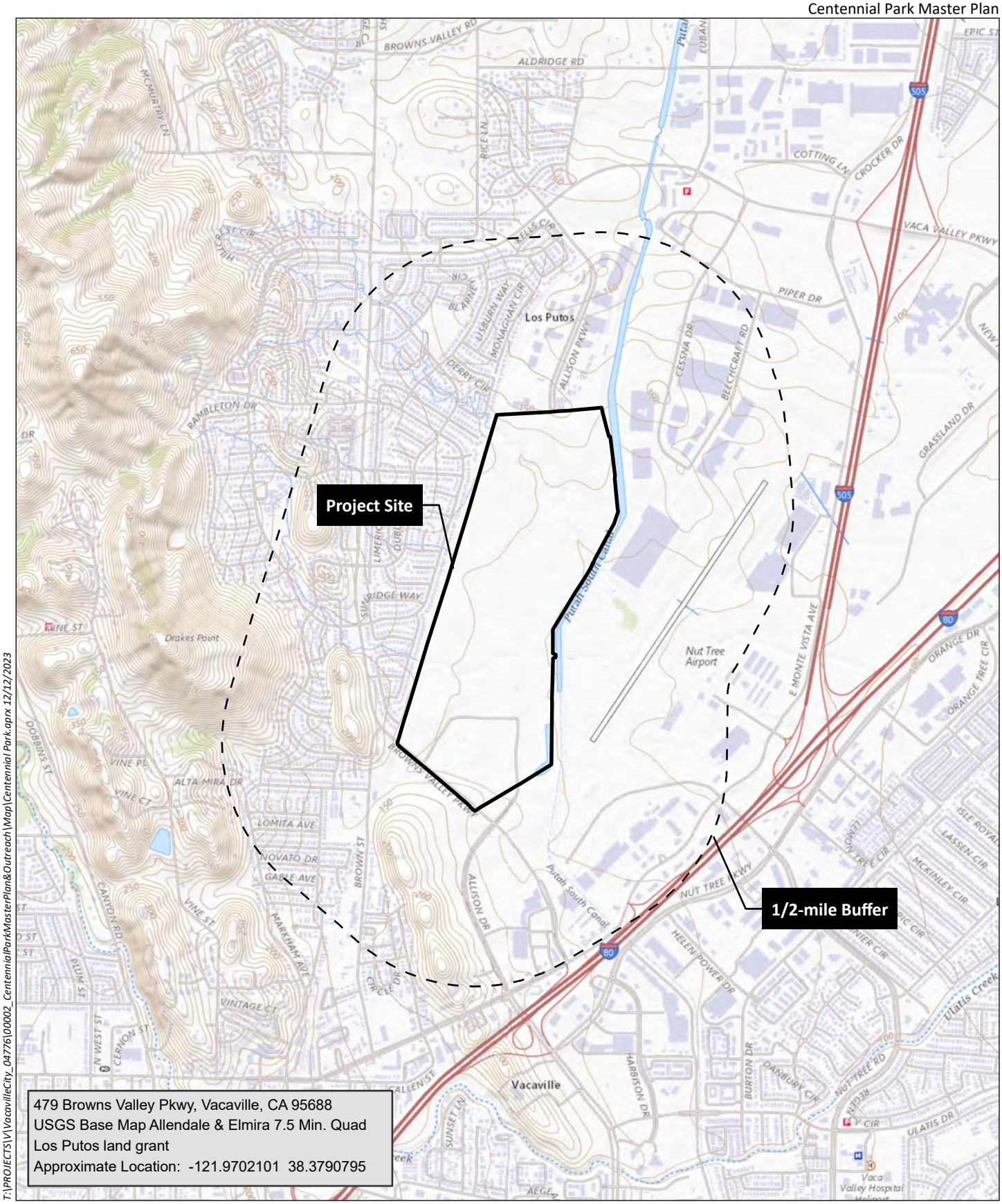
Company/Firm/Agency: HELIX Environmental Planning, Inc.

Street Address: 1180 Iron Point Road, Suite 130

City: Folsom, CA **Zip:** 95630

Phone: (916)-435-1205

Project Description: The Centennial Park Master Plan Project is located north of the intersection of Browns Valley Parkway and Allison Drive, west of the Nut Tree Airport, and south of Allison Drive in the city of Vacaville, Solano County, California. The proposed project includes the expansion of the existing Centennial Park which encompasses approximately 265 acres. The additional amenities to be developed consist of a community recreation center and outdoor seating area, water play area, dog park, skate park, remote-controlled car track, roller hockey court, renovated ballfield complex, basketball courts, tennis courts, sand volleyball courts, event pavilion, pollinator garden, disco golf course, bike park, and landscaping. The Centennial Park Master Plan Project is anticipated to be developed over time in phases as funding becomes available. The project site would also include the expansion of parking from approximately 380 existing parking spaces to over 1,000 surfaced parking spaces and would extend the Allison Drive access point in the northern portion of the project site. The Project Area is depicted on the attached map for your reference.



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0 2,000 Feet

Source: USGS National Map, 2020

HELIX Environmental Planning

Records Search Map

Figure 1

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

February 5, 2024

Ben Siegel
HELIX Environmental Planning, Inc.

Via Email to: BenS@helixepi.com

Re: Centennial Park Master Plan Project, Solano Counties

Dear Mr. Siegel:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

HELIX Environmental Planning, Inc.
1180 Iron Point Road, Suite 130
Folsom, CA 95630
916.435.1205 **tel**
619.462.0552 **fax**
www.**helixepi**.com

February 21, 2024 04776.00004.001

Dahlton Brown
Executive Director of Administration
Wilton Rancheria
9728 Kent Street
Elk Grove, CA 95624

Subject: Centennial Park Master Plan Project

Dear Executive Director Brown,

HELIX Environmental Planning, Inc. (HELIX) is preparing a Cultural Resources Assessment in support of Centennial Park Master Plan Project (Project) located within the city of Vacaville, Solano County, California. The Centennial Park Master Plan Project will include the expansion of the existing Centennial Park which encompasses approximately 265 acres. The additional amenities to be developed consist of a community recreation center and outdoor seating area, water play area, dog park, skate park, remote-controlled car track, roller hockey court, renovated ballfield complex, basketball courts, tennis courts, sand volleyball courts, event pavilion, pollinator garden, disc golf course, bike park, and landscaping. Additional improvements will include new maintenance buildings, restrooms, group picnic areas, walking trails, and enhanced landscaping. The project will also include the expansion of the park's primary parking lot from approximately 380 existing spaces to over 1,000 surfaced parking spaces and would extend the Allison Drive access point in the norther portion of the project site. The Centennial Park Master Plan Project is anticipated to be developed over time in phases as funding becomes available.

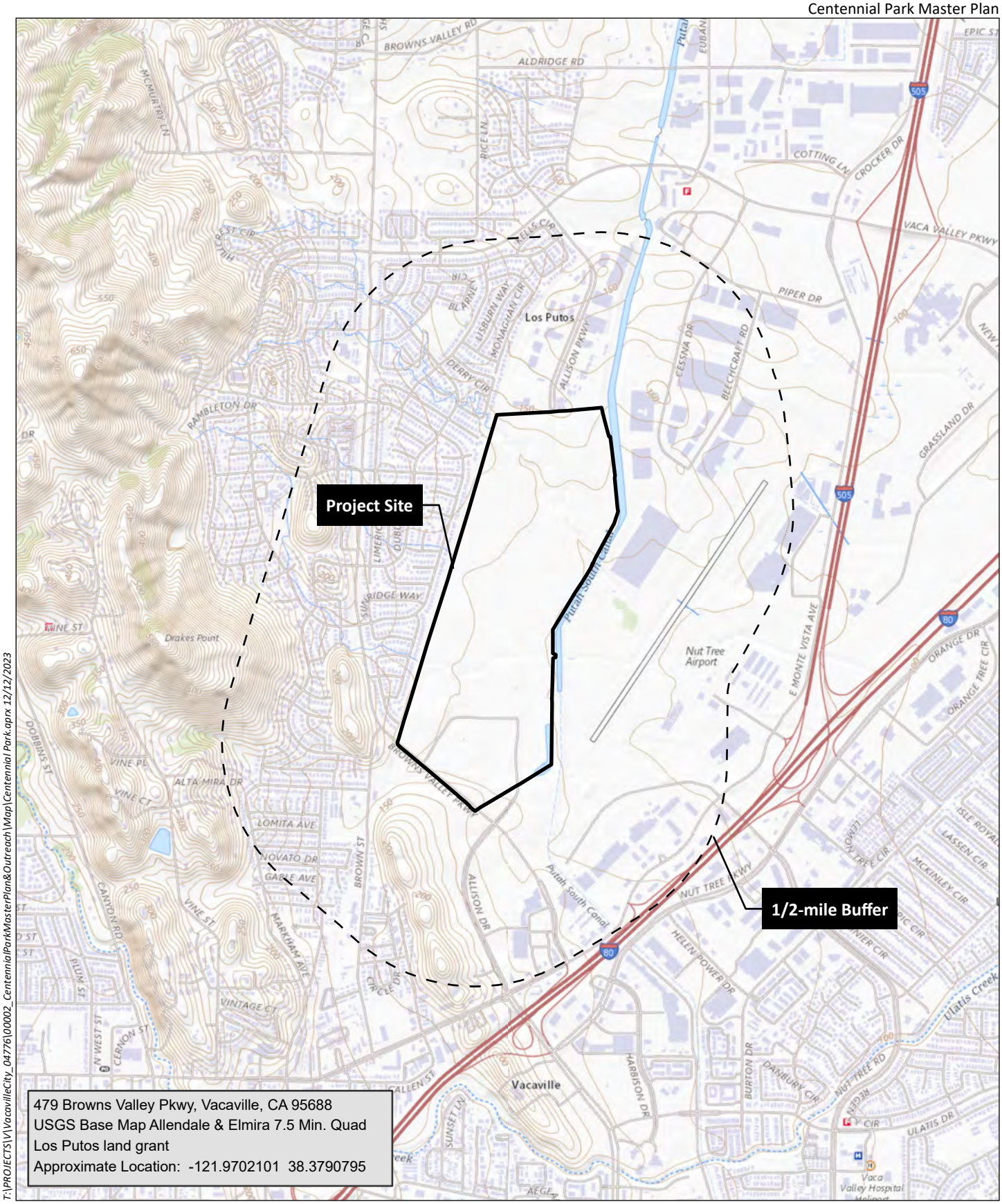
A search of the Native American Heritage Commission's (NAHC) Sacred Lands File returned negative results, and the NAHC suggested we contact you to ask if you have information you would like to share regarding Native American resources in or near the Project Area. The Project Area is located within the Los Putos Land Grant depicted within the U.S. Geological Survey (USGS) 7.5-minute *Allendale & Elmira, California* topographic quadrangle map. A map showing the Project Area is included with this letter for your reference.

If there are sensitive resources within or near the proposed Project Area that could be impacted by Project implementation, please advise us accordingly. Please note that this request is for informational purposes only. If you have any information, questions, or concerns regarding the proposed Project, please feel free to contact me directly at bens@helixepi.com or over the phone at (404) 312-5883.

Sincerely,

Benjamin D. Siegel

Benjamin D. Siegel, M.A., M.A., M.A., RPA
Cultural Resources Project Manager II
HELIX Environmental Planning, Inc.



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0 2,000 Feet

Source: USGS National Map, 2020

HELIX Environmental Planning

Records Search Map

Figure 1

Appendix D

Representative Photographs



Photograph 1. Overview of a Representative Grassy Field within the Central Third of Centennial Park showing Water Saturated Ground, photograph facing southwest, taken on 1/25/24.



Photograph 2. View of Dense Vegetation Found in Northern Third of the APE, photograph facing northwest, taken on 1/30/24.

S:\PROJECTS\V\VacavilleCity_04776\00004_CentennialParkMasterPlan\SMND_Reports\CRA\Appendix D



Photograph 3. View of Concrete rubble found in southern third of the APE, photograph facing north, taken on 1/23/24.



Photograph 4. View of Drainage within the Northwestern portion of the APE, photograph facing west, taken on 1/30/24.

S:\PROJECTS\V\VacavilleCity_04776\00004_CentennialParkMasterPlan\SMND_Reports\CRA\Appendix D



Photograph 5. View from southern most extent of HELIX's Survey of the NWIC reported location of resource P-12-001025 which as of the date of HELIX's survey appeared to be paved over with a walk path/bike path, photograph facing north, taken on 5/1/2024.



Photograph 6. View from Northern extent of HELIX's Survey of the NWIC reported location of resource P-12-001025 which as of the date of HELIX's survey appeared to be paved over with a walk path/bike path, photograph facing south, taken on 5/1/2024.

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Appendix E

Completed DPR Forms

*Recorded by: HELIX Environmental Planning, Inc. *Date: 5/1/24 ☐ Continuation ☒ Update

Over the years this historic-era railroad has gone by several names including Vaca Valley Railroad (1870-1877), Southern Pacific Railroad (1886-1957), the Vaca Valley & Clear Lake Railroad (1878-1886), and the Union Pacific Railroad (1957-1992). This resource was first formally recorded by Scott Crull, PhD, RPA in 2014 and portions of the broader reaches of the railroad and its associated railroad grade, depots, bridge, and related ancillary structures and company towns, have been recommended as contributing elements to the Vaca Valley Railroad Road Route district (P-57-000715).

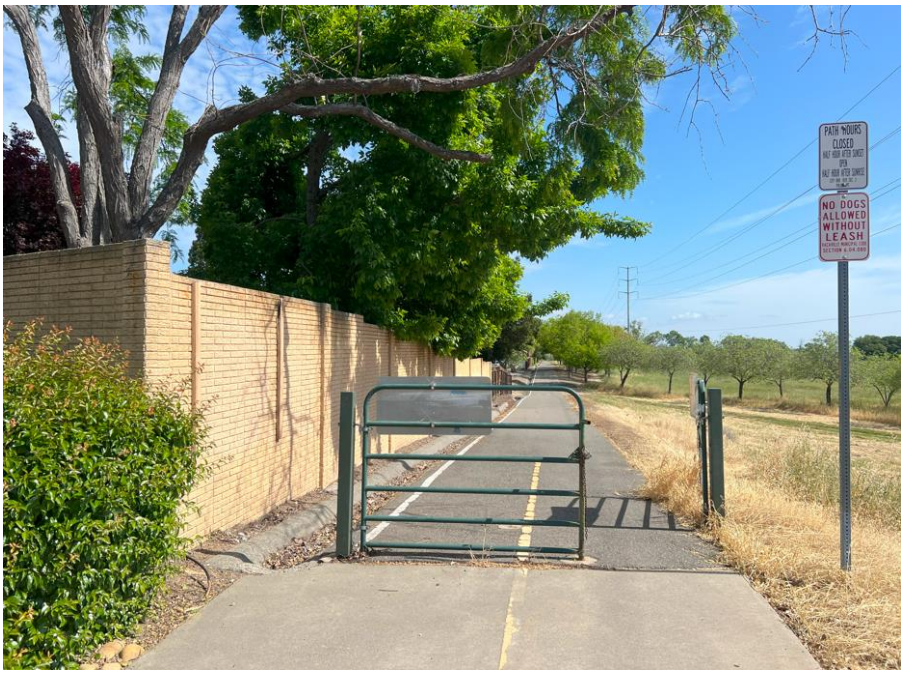
The original Vaca Valley Railroad (1870-1877) ran from Elmira to Vacaville. In 1878 the line was bought and renamed the Vaca Valley & Clear Lake Railroad (1878-1886) and track was laid to Rumsey, leading to the development of several company towns along the path. In 1886 the Southern Pacific's Northern Railroad Division bought the line and operated it until 1957, though the line extension from Capay to Rumsey stopped service in 1934 and the tracks were removed in 1937. Capay to Esparto service ended as of 1941 and the tracks were removed by 1944. Service continued from Elmira to Esparto up until 1957 and the tracks were removed from Vacaville to Esparto around 1975. The Elmira to Vacaville Line was operated by the Union Pacific Railroad up until 1992 and the tracks were finally removed around 1995. In some locations along its length the railroad grade is visilble however this grade is not the typical grade commonly seen for railroads in Northern California as there were no ballast rocks laid under the tracks along any portion of the route. Instead the ground was hand-flattened/packed and the rails were fixed to wooden ties laying on the bare ground (Crull 2014).

On May 1, 2024, HELIX staff surveyed an area reported by the NWIC to contain a south-north running linear segment of resource P-48-001025 between the UTM coordinates 10S 589874 4249186 and 10S 589445 (see associated resource location map). No related ancillary structures or engineering features were reported by the NWIC as lying within or alongside this segment of resource P-12-001025. HELIX's surveyor walked the entirety of the identified segment of the railroad alignment, and found no traces of the railroad. No raised berm or railroad bed/grade were found, nor were any railway ties or associated metal or wooden debris. Instead, HELIX's surveyor observed a paved walkway/bike path associated with Centenial Park. In some portions, this path abuts residential neigborhoods to the west (See included photographs on the next continuation sheet).

In speaking with Hew Hesterman, Park Planner for the City of Vacaville, who was on site to walk the NWIC reported location of the railroad segment with HELIX's surveyor, it was learned that the entirety of the railroad tracks were removed in 2006 for the purpose of the installation of the now extant paved walkway/bike path (Hew Hesterman pers comms 5/1/24).

As there are no longer any traces of the railway along the NWIC reported location of this recorded railway segment, HELIX recommends this segment of the resource as ineligible for listing in the National Register of Historic Places and California Register of Historic Resources, on the grounds that it does not retain integrity to its period of historic significance. As a result this segement of the railway should also not be considered a contributing element to the Vaca Valley Railroad Road Route district (P-57-000715).

***Recorded by:** HELIX Environmental Planning, Inc. ***Date:** 5/1/24 ☐ Continuation ☒ Update



View from southern most extent of HELIX's Survey of the NWIC reported location of resource P-48-001025 which as of the date of HELIX's survey appeared to be paved over with a walk path/bike path, photograph taken on 5/1/2024, facing north. Photograph #5935 in photolog.



View from middle of the extent of HELIX's Survey of the NWIC reported location of resource P-48-001025 which as of the date of HELIX's survey appeared to be paved over with a walk path/bike path, photograph taken on 5/1/2024, facing south. Photograph #6011 in photolog.



View from Northern extent of HELIX's Survey of the NWIC reported location of resource P-48-001025 which as of the date of HELIX's survey appeared to be paved over with a walk path/bike path, photograph taken on 5/1/2024, facing south. Photograph #6054 in photolog.

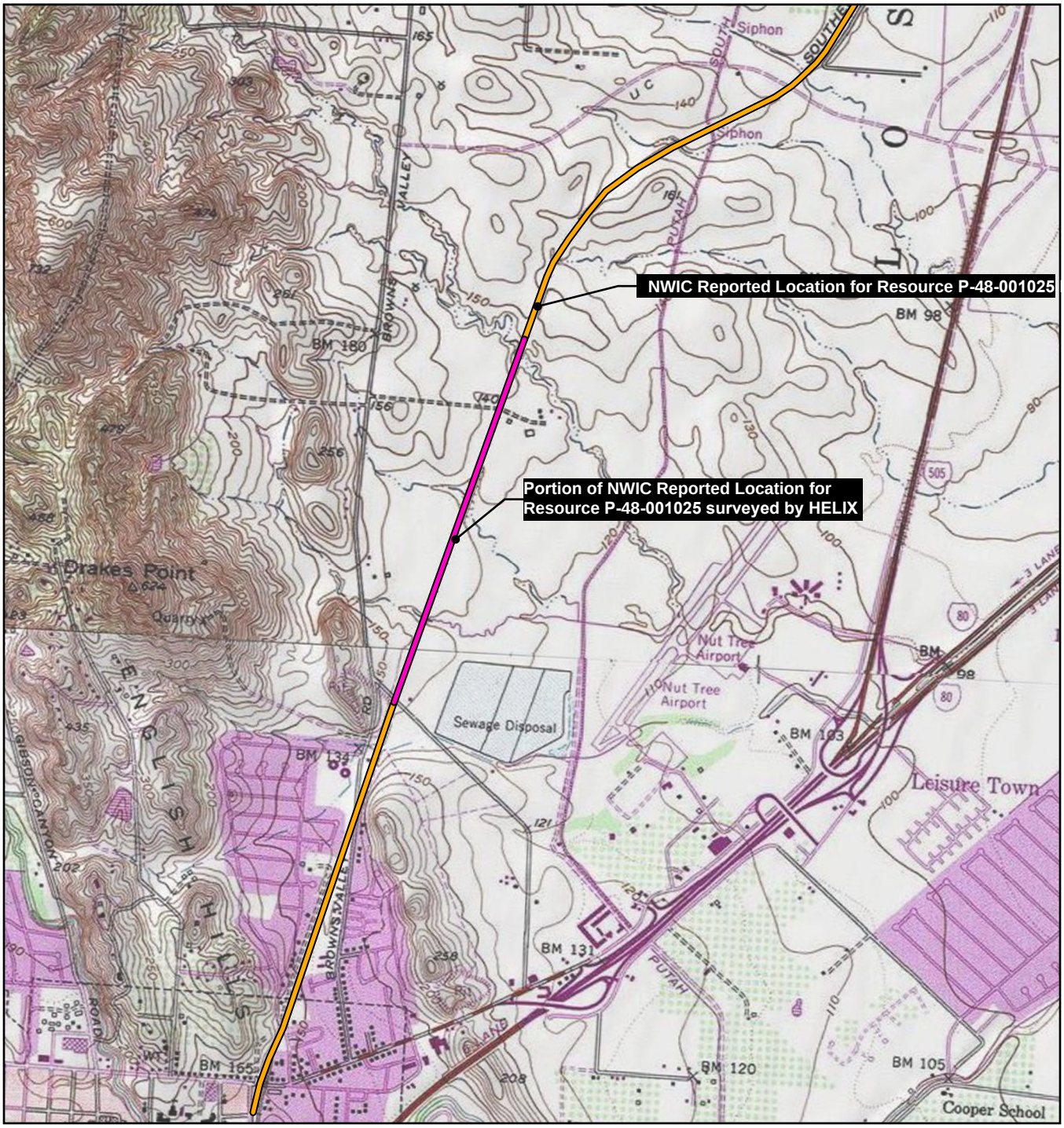
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #:
HRI #
Trinomial:

***Resource Name or #:** P-48-001025

***Map Name:** ALLENDALE & ELMIRA ***Scale:** 1:24,000 ***Date:**1988 & 1981



SCALE 1:24,000

1 0.5 0 1 Miles

1,000 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 Feet

1 0.5 0 1 Kilometers

TRUE NORTH

Appendix F

Phase 1 Environmental Site Assessment

PHASE I ENVIRONMENTAL SITE ASSESSMENT
270 BROWNS VALLEY PARKWAY
VACAVILLE
SOLANO COUNTY, CALIFORNIA
KLEINFELDER PROJECT NO. 24005105.001A

REPORT DATE: APRIL 17, 2024
REPORT VIABLE UNTIL: SEPTEMBER 8, 2024

DRAFT

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ONLY THE CLIENT OR ITS DESIGNATED REPRESENTATIVES MAY USE THIS DOCUMENT AND ONLY FOR THE SPECIFIC PROJECT FOR WHICH THIS REPORT WAS PREPARED.

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A Report Prepared for:

Helix Environmental Planning, Inc.
Mrs. Lesley Owning
1180 Iron Point Road, Suite 130
Folsom, California 95630

PHASE I ENVIRONMENTAL SITE ASSESSMENT
270 BROWNS VALLEY PARKWAY
VACAVILLE
SOLANO COUNTY, CALIFORNIA

Prepared by:

_____
Stefan J. Birardi
Project Professional

Reviewed by:

_____
Jim Helge, PMP
Principal Environmental Scientist

_____
Lizanne Simmons, PG 7431
Senior Principal Geologist

KLEINFELDER, INC.
3130 Kilgore Road, Suite 200
Rancho Cordova, CA 95670
P | 916.366.1701

Report Date: April 17, 2024
Report Viable Until: September 8, 2024
Kleinfelder Project No. 24005105.001A

DRAFT

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1 EXECUTIVE SUMMARY

A Phase I Environmental Site Assessment (ESA) was performed by Kleinfelder, Inc. (Kleinfelder) for Helix Environmental Planning, Inc. (Helix / Client) of an approximately 265-acre area of land which makes up Centennial Park (referred to hereinafter as the Subject Property). The Subject Property parcels are identified by the Solano County Office of the Assessor as Assessor's Parcel Numbers (APNs) 0129-220-030, 0129-220-040, 0129-220-050, and 0133-070-300 in the City of Vacaville, Solano County, California (Figure1). The Subject Property APNs are not assigned street addresses, although Centennial Park is associated with the addresses 270 Browns Valley Parkway and 501 through 523 Browns Valley Parkway. The Subject Property is occupied by Centennial Park (Figure 2).

Information gathered and activities performed for this Phase I ESA were consistent with the guidelines in ASTM International Designation E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (the "ASTM Standard"), the All Appropriate Inquiry (AAI) section of the Small Business Liability Relief and Brownfields Revitalization Act (the Federal Brownfields Law).

A summary of findings is provided below:

- The Subject Property as Centennial Park which comprises four parcels of approximately 265-acres, identified by the Solano County Assessor as APNs 0133-070-300, 0129-220-030, 0129-220-040, and 0129-220-050. Street addresses are not assigned to the parcels; however, Centennial Park is associated with 270 Browns Valley Parkway and 501 through 523 Browns Valley Parkway in the City of Vacaville, Solano County, California.

- The Subject Property consists of open and developed park space. The developed portion includes four baseball fields, recreational trails, off-leash dog park areas, four tennis courts, five soccer fields and associated structures, a restroom building, a maintenance area, and asphalt-paved parking areas in the south and an open space preserve in the north. During the site reconnaissance, groundwater monitoring wells were observed along Allison Drive in the eastern portion of the Subject Property and along the western recreational trails near the former landfill. Storm drains were present within the southcentral and southwestern parking areas. Several soil piles were observed in the northwest portion of the Subject Property and a concrete debris field was observed on the southeastern portion of the Subject Property. The origins of

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the piles/debris field are not known. Pad-mounted transformers were observed near the soccer and baseball fields and appear in good condition. A stormwater retention pond located along the southeast Subject Property boundary has formed into a wetland. Two beaver dams were observed within the southern portion of Horse Creek.

- Based on historical records reviewed, the Subject Property was developed as early as 1937 with a residential-sized structure in the northwest corner of the Subject Property. By at least 1952, a landfill and sewage treatment plant were located in the southwestern and southern portions of the Subject Property, respectively. By 1993, both the landfill and sewage treatment plant appeared closed. Between 1993 and 2006, the southern portion of the Subject Property was redeveloped as Centennial Park with recreational trails and athletic fields. The landfill on the Subject Property was reportedly closed with an activity and use limitation (AUL) in place, although Kleinfelder has not been able to obtain a copy of the AUL to verify. Based on the presence of a AUL for the Subject Property, the historical use of the Subject Property for as a landfill and sewage treatment plant represent a Controlled Recognized Environmental Condition (CREC).

- The surrounding area was adjoined by a railroad from at least 1908 through 1980, and developed as mostly rural residential and agricultural until 1968 when Nut Tree Airport was constructed to the southeast. A single-family residential development adjacent to the west and commercial / industrial properties to the north were constructed by 1993. The Subject Property is adjoined to the north by a church and industrial property followed by commercial / industrial properties and to the east-northeast by commercial / industrial properties and Nut Tree Airport. The Subject Property is adjoined to the south by Browns Valley Parkway followed by vacant land. The Subject Property is adjoined to the west by single-family residential properties.

- The Subject Property is listed under the name Brown Sheet [Street] Landfill AKA Old Vacaville Landfill as a land disposal site. According to GeoTracker™, the cleanup status is listed as open as of January 1, 1965; however, according to reviewed documents, the landfill was closed in 1999.

Based on the results of the Phase I ESA, this assessment has revealed the following recognized environmental conditions (RECs), controlled RECs (CRECs), historical RECs (HRECs), *de minimis* conditions and/or significant data gaps in connection with the Subject Property:

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RECs

- The soil piles of unknown origin located in the northwest portion of the Subject Property.

CRECs

- The closed Brown Street Landfill / Vacaville landfill and former sewage treatment plant located in the southern portion of the Subject Property.

Business Environmental Risk (BER)

Although not considered a REC pursuant to ASTM Standard E 1527-21, the following BER has been identified:

- Agricultural use of the Subject Property from at least 1937 until at least 1974. It is common for residual concentrations of agrichemicals, including pesticides, arsenic, and lead associated with application for pest control, to be present in the shallow soils on agricultural sites. The pesticide concentrations in these situations are typically less than regulatory action levels, and the potential for further action to be required to address the pesticides is low.
- The presence of concrete debris at the southeastern portion of the Subject Property.

Based on the findings and conclusions of this Phase I ESA, Kleinfelder has the following recommendations for further assessment.

- Sampling of soil at the Subject Property in formerly agricultural areas in the northern portion of the site for organochlorine pesticides (OCPs) and metals.
- Sampling of soil piles in northern portion of Subject Property.
- Location of the AUL documentation associated with landfill.
- Removal of the concrete debris.

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Deviations from the Phase I ESA Standard (if any) are discussed in Section 8 of this report. This report is subject to the limitations in Section 2.5.

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2 INTRODUCTION

This report is a summary of work performed using the guidelines set forth in ASTM Designation E1527-21, *"Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process"* and AAI standards of the Small Business Liability and Brownfields Revitalization Act (the "Brownfields Law"). This report also generally conforms to the ASTM Standard's suggested table of contents. Minor format modifications have been made to the ASTM Standard's suggested table of contents to assist in better reading and understanding the report findings.

The purpose of this Phase I ESA is to identify potential or known hazardous materials, hazardous waste, and contamination, which may be present in the Subject Project vicinity. Information gathered and activities performed for this Phase I ESA were consistent with applicable guidelines set forth in ASTM Designation E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Pursuant to the ASTM Standard and limitations discussed in this report, RECs, and other environmental issues related to the Subject Property will be evaluated.

2.1 PURPOSE

The purpose of this Phase I ESA is to identify RECs, to the extent feasible pursuant to the scope of services defined in our Proposal No. M2401424.001P_REV2/SAC24P162447R2 dated February 24, 2024, and limitations discussed in this report. As defined in the ASTM Standard, a REC is:

> *(1) The presence of hazardous substances or petroleum products due to a release to the environment; (2) likely presence of hazardous substances or petroleum products due to a release or likely release to the environment; or (3) presence of hazardous materials or petroleum products under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.*
>
> *Note: "Likely" is that which is neither certain nor proved, but can be expected or believed by a reasonable observer based on the logic and/or experience of the environmental professional, and/or available evidence, as stated in the report to support the opinion given therein.*

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As defined in the ASTM Standard, a de minimis condition is:

> *A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.*

ASTM Standard E1527-21 definition of a CREC is:

> *… a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use limitations, activity and use limitations, institutional controls, or engineering controls).*

Additionally, the ASTM Standard defines HRECs, as:

> *… a past release of any hazardous substances or petroleum products that has affected the Subject Property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to environmental controls.*

The final decision on whether a past release is an HREC rests with the Environmental Professional (EP), and will be influenced by the current impact (if any) of the past release to the Subject Property.
Finally, the ASTM Standard defines a BER as:

> *"…a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations..."*

This report describes Kleinfelder's assessment methodology and documents our findings, subject to the limitations presented in Section 2.5 of this report.

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Kleinfelder professionals conducting this site assessment included Ms. Erin Abendroth, under the direction of Mr. James Helge, who performed the site reconnaissance and Mr. Stefan Birardi, who was the primary author of this report. Ms. Lizanne Simmons provided technical review of the report and Mr. James Helge provided project oversight. Resumes of Environmental Professionals are available from Kleinfelder upon request.

2.2 DETAILED SCOPE-OF-SERVICES

To achieve the stated purpose, the following scope of services was undertaken by Kleinfelder for this project:

- Section 2, **Introduction**, includes a discussion of the purpose/reason for performing the Phase I ESA, additional services requested by the Client (e.g., an evaluation of business environmental risk factors associated with the Subject Property), significant assumptions (e.g., property boundaries if not marked in the field), limitations, exceptions, special terms and conditions (e.g., contractual), and user reliance parameters.

- Section 3, **Subject Property Description**, is a compilation of information concerning the Subject Property location, legal description, current and proposed use of the Subject Property, a description of structures and improvements on the Subject Property at the time of Kleinfelder's assessment, and adjoining property use.

- Section 4, **Records Review**, is a compilation of Kleinfelder's review of several databases available from Federal, State, and local regulatory agencies regarding hazardous substance use, storage, or disposal at the Subject Property; and for off-site facilities within the search distances specified in the ASTM Standard. Records provided by the Client are summarized and copies of relevant documents are included in the appendices of this report. Physical setting sources (including topography and soil and groundwater conditions) and typical Client-provided information (e.g., title records, environmental liens, specialized knowledge, valuation reduction for environmental issues, and owner, property manager, and occupant information) are also summarized in this section. Other interviews with people knowledgeable about the Subject Property are included in Section 7.

- Section 5, **Historical Use Information**, summarizes the history of the Subject Property and adjoining properties. This Subject Property history is based on various sources, which may include a review of historical aerial photographs, Sanborn Fire Insurance Maps, city or suburban

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directories, historical topographic maps, building department records, and results of previous site assessments (if any and reasonably ascertainable).

- Section 6, **Site Reconnaissance**, describes observations by Kleinfelder during the site reconnaissance of the Subject Property and surrounding areas. The methodology used and limiting conditions are described in this section.

- Section 7, **Interviews**, is a summary of telephone and personal interviews performed with "Key Subject Property Managers" that may include the Subject Property owner/manager, occupants/tenants, local government officials, and the Client. Additional interview sources may be contacted if Key Subject Property Managers were not available prior to production of this report, and may include adjoining landowners and people with historical knowledge of the area.

- Section 8, **Evaluation**, is a presentation of our findings and opinions regarding the information in Sections 3 through 7, and presents our conclusions regarding the presence of RECs, HRECs, CRECs, and *de minimis* conditions connected with the Subject Property.

- Section 9, **References**, is a summary of the resources used to compile this Phase I ESA report.

A statement of qualifications of the signatories of this report is provided in Appendix A, and pertinent documentation regarding the Subject Property is included in Appendices B through D.

2.3 ADDITIONAL SERVICES

An evaluation of business environmental risk associated with the Subject Property was not included in Kleinfelder's scope of services. The scope of this Phase I ESA does not incorporate ASTM Standard non-scope considerations such as asbestos-containing materials (ACMs), radon, lead-based paint (LBP), lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and high-voltage power lines.

2.4 SIGNIFICANT ASSUMPTIONS

Kleinfelder does not guarantee the accuracy of the information supplied by its sources; but reserves the right to rely on this information in formulating a professional opinion on the potential for contamination at the Subject Property. Kleinfelder also assumes The Client provided all applicable and available

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environmental records and specialized knowledge regarding the Subject Property. Kleinfelder assumes that any potential historical agrichemical/pesticide application which may be associated with the identified historical agricultural land use was performed in a customary manner in strict accordance with the agrichemical/pesticide manufacturer labels; and this assumption does not apply to any potentially identified areas associated with agrichemical storage, mixing, transportation, spills, and/or disposal. If specific information was not available, Kleinfelder also made assumptions for this Phase I ESA regarding the groundwater flow direction beneath the Subject Property based on observed conditions and a review of United States Geological Survey (USGS) Topographic Maps and online USGS StreamStats drainage basin delineation tool. Kleinfelder assumed that historical aerial photographs, topographic maps, and other information was representative of conditions during periods between coverage.

Kleinfelder has not made other significant assumptions during the performance of this Phase I ESA.

2.5 LIMITATIONS AND EXCEPTIONS

Phase I ESAs are non-comprehensive by nature and are unlikely to identify all environmental problems or eliminate all risk. This report is a qualitative assessment. Kleinfelder offers a range of investigative and engineering services to suit the needs of our clients, including more quantitative investigations. Although risk can never be eliminated, more detailed and extensive investigations yield more information, which may help the Client understand and better manage risks. Since such detailed services involve greater expense, we ask our clients to participate in identifying the level of service, which will provide them with an acceptable level of risk. Please contact the signatories of this report if you would like to discuss this issue of risk further.

Kleinfelder performed this Phase I ESA in general accordance with the guidelines set forth in the ASTM Standard, and the proposed scope subsequently approved by the Client. No warranty, either express or implied, is made. Environmental issues not specifically addressed in this report were beyond the scope of our services and not included in our evaluation.

Land use, Subject Property conditions (both on-site and off-site), and other factors will change over time (e.g., EDR, *The EDR Radius Map™ Report with GeoCheck®*). Since Subject Property activities and regulations beyond our control could change at any time after the completion of this report, our observations, findings, and opinions can be considered valid only as of the date of *The EDR Radius Map™ Report with GeoCheck®* (March 12, 2024), which was used in the preparation of this report. Additionally, Subject Property conditions observed were limited to readily apparent environmental conditions observed at the Subject Property during the site reconnaissance on March 24, 2024.

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This report may be used only by the Client, only for the purposes stated, and pursuant to Section 4.6 of the ASTM Standard, this report should not be relied upon after 180 days from the date of its oldest component (March 12, 2024), which is September 8, 2024. Land or facility use, on and off-site conditions, regulations, or other factors may change over time, and additional work may be required with the passage of time. No party other than the Client may rely on this report without prior written authorization from Kleinfelder. Non-compliance with any of these requirements by the Client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party, and the Client agrees to defend, indemnify, and hold Kleinfelder harmless from any claim or liability associated with such unauthorized use or non-compliance.

During the course of the performance of Kleinfelder's services, hazardous materials may have been discovered. Kleinfelder assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or present on the Subject Project, or from the discovery of such hazardous materials. Nothing contained in this report should be construed or interpreted as requiring Kleinfelder to assume the status of an owner, operator, or generator, or person who arranges for disposal, transport, storage, or treatment of hazardous materials within the meaning of any governmental statute, regulation, or order. The Client is solely responsible for directing notification of all governmental agencies, and the public at large, of the existence, release, treatment, or disposal of any hazardous materials observed at the Subject Property, either before or during performance of Kleinfelder's services.

2.6 SPECIAL TERMS AND CONDITIONS

No special terms and conditions were agreed to by the Client and Kleinfelder.

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3 SITE DESCRIPTION

The Subject Property description is presented in this section and addresses the condition of the Subject Property at the time of the Phase I ESA. The Subject Property location is shown on Figure 1. Tables 3-1 through 3-4 summarize the physical characteristics of the Subject Property and adjoining properties.

3.1 LOCATION AND LEGAL DESCRIPTION

The information presented in Table 3-1 includes the physical location and legal description of the Subject Property. This information was obtained from review of various maps (such as topographic maps and tax assessor maps), aerial photographs, public records at City and/or County offices, interviews, and/or information provided by the Client.

Table 3-1
Location and Legal Description

PARAMETER	INFORMATION/COMMENTS
LOCATION	The Subject Property is located north of the intersection of Browns Valley Parkway and Allison Drive in the City of Vacaville, Solano County, California (see Figure 1, Subject Property Location Map).
ASSESSOR'S PARCEL NUMBER(S)	The Subject Property is associated with APNs 0129-220-030, 0129-220-040, 0129-220-050, and 0133-070-300.
LEGAL DESCRIPTION	The legal descriptions of the Subject Property parcels are provided in the EDR Environmental Lien and AUL Search (EDR, 2024c)
ADDRESS(ES)	The Subject Property parcels are not assigned street addresses; however, Centennial Park is associated with 270 Browns Valley Parkway and 501 through 523 Browns Valley Parkway.
SECTION, TOWNSHIP, AND RANGE	The Subject Property is located in Township 6 North, Range 1 West, Section 00, Mount Diablo Principal Baseline and Meridian, in Solano County.
ZONING	Based on information obtained from the City of Vacaville Zoning Map (https://cov.maps.arcgis.com/apps/webappviewer/index.html?id=0e7eec0cd681438fb0aeb4e7ea8c83eb), the Subject Property is assigned a zoning designation "PR", representing "Parks & Recreation".

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3.2 CURRENT / PROPOSED USE OF THE SUBJECT PROPERTY

At the time of Kleinfelder's assessment, land use in the immediate Subject Property vicinity appeared to be used for commercial and industrial purposes. Current and proposed uses are described in Table 3-2.

Table 3-2
Current / Proposed Uses

PARAMETER	GENERAL OBSERVATIONS
CURRENT USE	The Subject Property is currently developed as Centennial Park.
PROPOSED USE	Kleinfelder understands the Subject Property is being developed for recreational use as part of the Centennial Park Master Plan.

3.3 DESCRIPTION OF STRUCTURES / IMPROVEMENTS

Structures and/or improvements observed on the Subject Property at the time of Kleinfelder's site reconnaissance are described in Table 3-3.

Table 3-3
Structures / Improvements

PARAMETER	GENERAL OBSERVATIONS
STRUCTURES	The Subject Property is developed with a restroom facility associated with the baseball fields.
IMPROVEMENTS	The Subject Property is improved with four baseball fields, recreational trails, off-leash dog park areas, four tennis courts, five soccer fields, and asphalt paved parking areas.

3.4 CURRENT USES OF ADJOINING PROPERTIES

Kleinfelder performed a brief drive-by survey of the properties adjoining the Subject Property on March 24, 2024. A summary of the surrounding properties is presented in Table 3-4 and shown on Figure 2, Subject Property Vicinity Map.

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Table 3-4
Adjoining Properties

DIRECTION	LAND USE DESCRIPTION
NORTH	The Subject Property is adjoined to the north by New Hope Christian Fellowship church (4910 Allison Parkway) and WillScot Sacramento (4911 Allison Parkway).
EAST	The Subject Property is adjoined to the east by Putah South drainage channel, North Bay Distribution (2050 Cessna Drive), Automatic Bar Controls, Inc. (2060 Cessna Drive), Pacific Cycle, Inc (2070 Cessna Drive), and by the southern portion of Nut Tree Airport (301 County Airport Road).
SOUTH	The Subject Property is adjoined to the south by Browns Valley Parkway followed by undeveloped land.
WEST	The Subject Property is adjoined to the west by single-family residential homes.

Hazardous materials and petroleum products were not observed to be stored on the properties adjoining the Subject Property at the time of the site reconnaissance. No other indications of obvious or suspect RECs were apparent on the adjoining properties at the time of Kleinfelder's site reconnaissance.

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4 RECORDS REVIEW

4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

The purpose of the records review was to obtain and review records that would help to evaluate RECs of potential concern in connection with the Subject Property and bordering properties. Federal, state and local regulatory agencies publish databases or "lists" of businesses and properties that handle hazardous materials or hazardous waste or are the known location of a release of hazardous substances to soil and/or groundwater. These databases are available for review and/or purchase at the regulatory agencies, or the information may be obtained through a commercial database service. Kleinfelder contracted a commercial database service, EDR of Shelton, Connecticut to perform the government database search for listings within the appropriate ASTM Standard minimum search distance of the Subject Property. Kleinfelder provided EDR with a Subject Property map to incorporate the search distances from the Subject Property boundary. Included in *The EDR Radius Map™ Report with GeoCheck®* is a listing of specific databases outlined by the ASTM Standard. A listing of the search distances, databases evaluated, dates the databases were last updated, and types of information contained in each database are included in the regulatory database search provided as Appendix B to this report.

EDR utilizes a geographical information system to plot the locations of reported spills, leaks, incidents, etc. Kleinfelder reviews this information to help establish if the Subject Property, or nearby properties, have been included in the noted databases and lists. Each of the listings was reviewed to assess whether the corresponding property details included in the EDR report revealed a potential environmental impact to the Subject Property. A number of listings in the EDR database report were found not to have the potential to impact the Subject Property based on the following, or a combination thereof:

- The listed property was located at a distance where the facility would be unlikely to impact the Subject Property based on Kleinfelder's evaluation of the relevant data in the EDR report and knowledge of the Subject Property vicinity.
- The listed property was located in a down-gradient or cross-gradient direction from the Subject Property, based on the anticipated direction of groundwater flow at the property being evaluated, and is located at a distance that would be unlikely to impact the Subject Property. Note that groundwater flow direction may be variable in the vicinity of the Subject Property and

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determinations as to down- or cross-gradient direction were made only when groundwater flow direction was available for a specific property.

- The listed property was identified in the UST or SQG databases and was not on or immediately adjoining the Subject Property. The property was not listed in other databases that reported a release of a hazardous substance or petroleum product and/or was not listed as having environmental violations. The listing of a facility on these databases alone is not indicative of an unauthorized release.

- The listing for the facility suggested a short-term release had occurred (i.e., from incidental traffic accidents, or chemicals from illegal drug labs found at residences) with associated response actions completed.

- The quantity of the hazardous substances or petroleum product released from an off-site facility was not considered to have resulted in contamination above the most stringent criteria that would require regulatory action. Therefore, no impact to the Subject Property is anticipated.

- The listed property record indicates that the property was characterized, the reported release affected soil only, the listed property was not on or adjacent to the Subject Property, and the release was not recognized as indicative of area-wide conditions or was characterized as a soil removal action only.

- The listed property record indicates that contamination on the property is limited to relatively non-mobile contaminants, including polyaromatic hydrocarbons and metals, in soil only, on a non-adjacent property.

- The listed property record indicates that the case has been closed to the satisfaction of the designated lead regulatory agency and residual contamination, if present, is not considered likely to affect the Subject Property based on one or more of the criteria mentioned in the bulleted items above (referred in the ASTM Standard as an HREC).

Based on these criteria indicating no material threat of a release that affected the Subject Property and/or no release that could require future regulatory agency oversight, these listings were not evaluated further and are not discussed in the following sections.

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4.2 RESULTS OF DATABASE SEARCH

The remaining property listings were reviewed to assess whether these properties had environmental releases, which may have resulted in RECs in relation to the Subject Property. The listed properties for which a reported release may have resulted in a REC were further assessed by performing a review of agency files available through the Central Valley Regional Water Quality Control Board (CVRWQCB) / State Water Resources Control Board (SWRCB's) GeoTracker™ website (https://geotracker.waterboards.ca.gov/) and other relevant regulatory agency websites, to evaluate whether the listed release represents a potential impact to the Subject Property.

4.2.1 Subject Property Listings

The Subject Property is listed as a closed and unpermitted solid waste disposal site under the name Old Vacaville Landfill. Additional information was not provided by EDR. However, a request for information was submitted to the CVRWQCB on March 18, 2024. The CVRWQCB provided files for review on April 11, 2024, these are discussed in Section 4.3.9.

4.2.2 Off-site Listings

The following off-site facilities were assessed as potential concerns to the Subject Property. A summary of the information is included in Table 4-1.

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Table 4-1
Off-Site Facilities of Potential Concern

FACILITY OR SITE NAME	FACILITY OR SITE ADDRESS	PROXIMITY TO SUBJECT PROPERTY (FEET)	COMMENTS
Cleanhome Associates	543 Shannon Drive	Adjacent to the west	Cleanhome Associates is listed in the EDR Historical Drycleaners database as a dry-cleaning plant except for rugs in 2007 and 2008. According to the City of Vacaville zoning map, the area is zoned "RL-6" representing residential low density. Based on the residential nature of the neighborhood, it is unlikely this facility currently operates at this location, and therefore, not considered a REC.
Williams Scotsman	4911 Allison Parkway	Adjacent to the north	Williams Scotsman is listed in the Resource Conservation and Recovery Act (RCRA) Non-Generator (NonGen) database as of 2010 with a North American Industry Classification System (NAICS) description of painting and wall covering contractors. Based on the lack of reported releases and type of database listings, this facility is not considered a REC.
Court Galvanizing, Inc	4937 Allison Parkway	Approximately 1,005-feet north	Court Galvanizing, Inc is listed as a large quantity generator (LQG) for handling chromium and lead wastes as of 2006. The facility is listed in the California Environmental Reporting System (CERS) Hazardous Waste (Haz Waste) database for generation hazardous waste and treating hazardous waste onsite. Additionally, the facility is listed in the Envirostor database as an active tiered permitted facility needing evaluation. The facility received violations in 2006 and 2014, for failure to properly close hazardous waste containers, failure to submit a complete annal stormwater report in 2005/2006, and failure to inspect hazardous waste storage areas weekly. Based on the lack of reported releases, this facility is not considered a REC to the Subject Property.
Quick Lane of Vacaville	2001 Allison Drive	Approximately 2,250-feet south	Quick Lane of Vacaville is listed in the CERS Tanks and CERS Haz Waste databases as a chemical storage facility and for maintaining aboveground storage tanks (ASTs) containing petroleum. The facility received violations in 2018 and 2023 related to the business plan program, failure to report data electronically, failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days of generation, failure to address the Spill Prevention, Control, and Countermeasure (SPCC) plan, failure to submit hazardous material information, failure to meet satellite accumulations regulations, and failure to property label hazardous waste. Based on the distance and direction of this facility down-gradient to the Subject Property, this facility does not represent a REC to the Subject Property.

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4.2.3 Orphan List

Sites not plotted by EDR due to poor or inadequate address information are referred to as orphan sites. One unmapped orphan site is listed in the EDR report. The orphan summary/unmapped site report was reviewed to assess the potential for the listed facilities to pose a REC to the Subject Property. The orphan site is listed in the California Integrated Water Quality System (CIWQS) database under the name Centennial Park Trail Dev which is likely related to the improvements to the Subject Property and not considered an environmental concern.

4.3 OTHER RECORDS REVIEWED / AGENCIES CONTACTED

The following additional sources of environmental records were reviewed during this Phase I ESA for the purposes of meeting the ASTM Standard. Local regulatory agencies were contacted for reasonably ascertainable and practically reviewable documentation regarding RECs present at the Subject Property and adjoining facilities. Summaries of interviews with local regulatory agency representatives are included in Section 7 of this report (with interview documentation included in Appendix C). The following agencies (if marked with an "X") were contacted for documentation:

- ☒ California Department of Conservation, Geologic Energy Management Division (CalGEM)
- ☒ Yolo-Solano Air Quality Management District (AQMD)
- ☒ City of Vacaville
- ☒ City of Vacaville Building Department
- ☒ City of Vacaville Fire Department
- ☒ Solano County Building Department
- ☒ Solano County Department of Public Works (DPW)
- ☒ Solano County Department of Resource Management Environmental Health Division
- ☒ State Water Resources Control Board / GeoTracker™ / Central Valley Regional Water Quality Control Board (CVRWQCB)
- ☒ California Department of Toxic Substances Control (DTSC)
- ☒ United States Environmental Protection Agency (USEPA)
- ☒ Pipeline and Hazardous Materials Safety Administration (PHMSA), National Pipeline Mapping System (NPMS)

Information from these agencies is presented below.

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4.3.1 California Department of Conservation, Geologic Energy Management Division

Information concerning oil and gas fields was obtained by Kleinfelder from CalGEM's Well Finder database (https://maps.conservation.ca.gov/doggr). Findings from the map review are discussed in Table 4-2, and a copy of the CalGEM well finder search results are provided in Appendix C.

4.3.2 Yolo-Solano Air Quality Management District

Kleinfelder submitted a request for information to the AQMD on March 14, 2024, for assistance in air quality related records and permits. A response by the AQMD was received on March 18, 2024, stating there are no available records for the Subject Property.

Copies of the relevant documents are presented in Appendix C.

4.3.3 City of Vacaville

Kleinfelder submitted a request for information to the City of Vacaville via their online public records request portal (https://vacavilleca.govqa.us/WEBAPP/) on March 12, 2024, for assistance in locating building permits, code enforcement, inspection documents, planning records, and environmental reports. A positive response for records was received on April 2, 2024, and contained the following information:

- A wetland assessment and reconnaissance special status species survey was performed in May 1992 for the 150+ acre Vacaville Park property. Of the fourteen special status wildlife species considered potential at the Subject Property, only the western pond turtle was observed.
- On August 27, 1996, Jones & Stokes Associates, Inc. conducted a survey of Centennial Park. The purpose of the survey was to assess the status of the abandoned sewer ponds, evaluate the site for federally listed threatened or endangered shrimp species, and to perform a survey for wetlands for a proposed access road and detention basin. The results of the survey found the abandoned sewer ponds were functioning as natural seasonal wetlands and had the potential to serve as a suitable shrimp habitat.
- An *Archaeological Study of Centennial Park I* report, dated January 1997, was prepared at the request of the City of Vacaville. The Study was conducted on undeveloped portions of Centennial Park comprising approximately 76 acres. The report notes that the area was

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previously used for sewage disposal and landfill, although partially developed with baseball fields.

- A Centennial Park Master Plan Traffic Study report dated February 1997. The report provided traffic analysis and traffic mitigation determinations for proposed Centennial Park improvements.

- A Centennial Park Masterplan and Mitigated Negative Declaration, File No 97-177 was filed February 14, 1997. The Centennial Park project proposed improvements to APNs 0129-220-03 through 0129-220-05. At the time this document was filed, the Subject Property consisted of four baseball fields with a restroom and concessions building, three synthetic turf soccer fields, and 102 parking spaces. Four tennis courts and 88 parking spaces were approved but not yet constructed. Proposed improvements included a 76,000-square-foot gymnasium containing offices, retail, snack bar, storage, and restrooms. Approximately 5 acres of the Subject Property (southern portion) was a former landfill used by the City of Vacaville for household waste. Additionally, inactive settling ponds which were part of the sewage treatment area are present at the Subject Property.

- A Phase I ESA was conducted on APN 0129-220-030 and -040 by Faultline Associates, Inc., dated April 7, 1997. These two parcels are located in the central portion of existing centennial park, north of the Old City Landfill and former wastewater treatment area. The Phase I ESA noted no structures were located on the two parcels, three pad-mounted transformers were present and appeared in good condition, a domestic water well was located at the “park” parcel directly south of APN 0129-220-030 and -040, and surface water runoff drained to the lower tributary of Horse Creek. Faultline Associates, Inc’s Phase I ESA concluded that the site survey detected no visual or olfactory evidence of hazardous material/waste impacts, and based on regulatory file review, neither native soils or localized groundwater has been impacted by generated chemicals from up- or cross-gradient sources.

- The United States Army Corps of Engineers issued the City of Vacaville a permit to create a mixed-use sports complex/recreation facility at Centennial Park. The permit authorized work to be completed from the issuance of the permit in 1997 to December 31, 2002.

- An undated City of Vacaville Initial Study Environmental Information Form was completed by Mr. Bob Farrington for the Centennial Park Masterplan Project comprising APNs 0129-220-030, 0129-220-040, and 0129-220-050. Mr. Farrington notes that an abandoned landfill study has

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been performed at the Subject Property, but indicates he does not know the date it was completed.

4.3.4 City of Vacaville Building Department

Kleinfelder reviewed available information for the Subject Property on the City of Vacaville's online building permits database (https://permits.cityofvacaville.com/eTRAKiT3/Search/permit.aspx) on March 14, 2024 for documents regarding permits associated with the Subject Property. The following permits were found for the Subject Property.

APN 0129-220-030

- A building permit (Permit No. 1902-0294) was issued February 26, 2019, to install two shade structures at the interim dog park.

APN 0129-220-050

- An electrical power pole temporary non-residential permit (Permit No. 01080238) was issued August 24, 2001.
- An electrical miscellaneous non-residential permit (Permit No. 06100087) was issued October 11, 2006.
- A foundation only non-residential permit (Permit No. 12060181) was issued June 28, 2012, for a foundation with electrical hook up to replace two trailers with one trailer.
- An electrical miscellaneous non-residential permit (Permit No. 2305-0455) was issued May 31, 2023, to install new poles and sports lighting at Centennial Park.
- An accessory structure non-residential permit (Permit No. 2403-0120) was applied for on March 11, 2024, for a 600-square-foot cantilever fabric shade structure.

Permits were not found for APNs 0129-220-040, and 0133-070-300. Copies of the information is included in Appendix C.

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4.3.5 City of Vacaville Fire Department

Kleinfelder submitted a request for information to the City of Vacaville Fire Department via their online public records request portal (https://vacavilleca.govqa.us/WEBAPP/) on March 21, 2024, for assistance in locating hazardous wastes, violations, and chemical spills. The Fire Department responded stating there are no available records for the Subject Property.

4.3.6 Solano County Building Department

Kleinfelder reviewed available information for the Subject Property on the Solano County, Department of Public Work's online database (https://aca-prod.accela.com/SOLANOCO/Default.aspx) on March 14, 2024 for documents regarding industrial waste, building, planning, septic, well/borings, and environmental health permits associated with the Subject Property. No documents were found for the Subject Property. A copy of the negative search results is included in Appendix C.

4.3.7 Solano County Department of Public Works

Kleinfelder reviewed available information for the Subject Property on the Solano County, Department of Public Work's online database (https://www.solanocounty.com/depts/rm/permits.asp) on March 14, 2024 for documents regarding industrial waste, planning, septic, well/borings, and environmental health permits associated with the Subject Property. No documents were found for the Subject Property. A copy of the negative search results is included in Appendix C.

4.3.8 Solano County Department of Resource Management Environmental Health Division

Kleinfelder reviewed available information for the Subject Property on the Solano County Department of Resource Management Environmental Health Division's online database (https://aca-prod.accela.com/SOLANOCO/) on March 14, 2024, for information regarding the Subject Property. Two permits were issued to APN 0129-220-050.

- A solid waste facility permit (Permit No. 501004-44G-1) was issued to Vacaville City Landfill with an invalid expiration date of January 1, 9999.
- A food facility permit (Permit No. 500486-16F-1) was issued to Centennial Park with an expiration date of September 30, 2024.

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No permits were found for APNs 0129-220-030, 0129-220-040, and 0133-070-300. Copies of the responses are provided in Appendix C.

4.3.9 State Water Resources Control Board, GeoTracker™ / Central Valley Regional Water Quality Control Board

Kleinfelder reviewed the SWRCB GeoTracker™ website (https://geotracker.waterboards.ca.gov/) for information pertaining to the Subject Property address and the Subject Property vicinity. The Subject Property was reported on the GeoTracker™ website under the name Brown Sheet LF AKA Old Vacaville Landfill. The Subject Property is listed as an open land disposal site as of Januray 1, 1965. Additional information as not available on the GeoTracker™ website. A summary of pertinent information for the properties of concern in the vicinity is presented above in Table 4-1, and copies are provided in Appendix C.

Kleinfelder submitted a request for information to the CVRWQCB on March 18, 2024. The CVRWQCB responded April 9, 2024, stating records were available to review in their file room. On April 11, 2024, Kleinfelder reviewed available CVRWQCB records which are summarized below.

Engineering-Science, Inc., conducted a Level II Environmental Assessment at the wastewater disposal ponds and landfill portions of the Subject Property in 1990. Seven bores (BH-1 through BH-7) were advanced in the former wastewater disposal ponds, three bores (BH-8 through BH-10) were advanced around the perimeter of the landfill, and six bores (GP-1 through GP-6) installed as landfill gas probes, were advanced in the former landfill area. A total of 24 sludge/soil samples were collected and analyzed for purgeable and extractable organic priority pollutants, organochlorine pesticides (OCPs), polychlorinated bisphenols (PCBs), total petroleum hydrocarbons (TPH), metals, and cyanide/phenolics.

- Toluene was detected in sample BH-1 collected from 2 feet below ground surface (bgs) at concentration 22 micrograms per kilogram (µg/kg).
- TPH was detected in sample BG-5 collected from 2 feet bgs at a concentration pf 12 milligrams per kilogram (mg/kg).
- OCPs and PCBs were not detected in samples analyzed.
- Metals – Soil samples collected from BH-1 through BH-7

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  - Iron – maximum of 21,000 mg/kg.
  - Cyanide/phenolics were not detected.

- Metals – Soil samples collected from BH-8 through BH-10
  - Iron - Maximum of 20,000 mg/kg.
  - Calcium – Maximum of 3,900 mg/kg.
  - Potassium - Maximum of 1,400 mg/kg.
  - Sodium – Maximum of 600 mg/kg.
  - Cyanide/phenolics were not detected.
- Metals – Soil samples collected from GP-1 through GP-6
  - Iron – maximum of 16,000 mg/kg.
  - Cyanide was detected in sample GP-3 collected from 10 feet bgs at 0.27 mg/kg.

Landfill gas samples collected from GP-1 through GP-6

- Normal levels of oxygen and nitrogen with slightly elevated levels of carbon dioxide detected.

Based on the soil analytical results, Engineering-Science, Inc. recommended the following:

- Collect additional landfill gas samples to verify absence of detectable levels of methane.
- Abandon landfill gas probes if methane is not detected.
- No additional site investigations were recommended.

4.3.10 California Department of Toxic Substances Control

Kleinfelder reviewed the DTSC EnviroStor online database (http://www.envirostor.dtsc.ca.gov/ public/) for information pertaining to the Subject Property and the Subject Property vicinity. The Subject Property was not reported on the EnviroStor website. A summary of pertinent information for the

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properties of concern in the vicinity is presented above in Table 4-1, and copies are provided in Appendix C.

4.3.11 United States Environmental Protection Agency

Kleinfelder reviewed the USEPA Superfund Site website for information regarding current and historical site activity locations and groundwater contamination plume boundaries associated with Brownfields properties, RCRA Corrective Action facilities, and Superfund National Priorities List (NPL) and Non-NPL sites. The Subject Property was not reported on the USEPA website. Copies of the map search results are provided in Appendix C.

4.3.12 Pipeline and Hazardous Materials Safety Administration, National Pipeline Mapping System

According to the California State Fire Marshal, pipeline information is available at the PHMSA's online NPMS (https://www.npms.phmsa.dot.gov). Kleinfelder, therefore, researched pipeline information on the NPMS for the Subject Property and vicinity. Based on our review of the NPMS, there are no mapped natural gas transmission pipelines or hazardous liquid pipelines located on the Subject Property. The nearest active natural gas pipeline is operated by Pacific Gas and Electric (PG&E) and mapped approximately 2,900 feet north of the Subject Property along Vaca Valley Parkway. A copy of the information obtained from NPMS is included in Appendix C.

4.4 PHYSICAL SETTING SOURCE(S)

Table 4-2 presents information concerning the physical setting of the Subject Property. This information was obtained from published maps.

Table 4-2
Physical Setting

Data	General Information
USGS TOPOGRAPHIC QUADRANGLE	Based on a review of the USGS Allendale, California 7.5-Minute Series (Topographic) Quadrangle Map dated 2022, the Subject Property is located at an approximate elevation of 127 feet above mean sea level (amsl). The topographic relief is generally flat in the Subject Property vicinity, sloping gently toward the east-southeast.
SOIL TYPE	The dominant soil composition in the vicinity of the Subject Property is classified as Clear Lake, poorly drained clay with slow infiltration rates (EDR, 2024a).

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Table 4-2 (cont.)
Physical Setting

Data	General Information
OIL AND GAS WELLS; OIL SEEPS	Kleinfelder searched the CalGEM's online Well Finder Database (https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx) for oil and gas wells located on the Subject Property and in the Subject Property vicinity. A plugged dry hole well is depicted approximately 0.83-mile east of the Subject Property. A copy of the Well Finder search results is provided in Appendix C.

Information about the regional geology is presented in Table 4-3. This information was obtained by Kleinfelder from published data and maps, interviews with public agencies, and/or previous investigations performed by Kleinfelder in the Subject Property vicinity.

Table 4-3
Regional Geology and Hydrogeology

PHYSICAL PARAMETER	INFORMATION/COMMENTS
REGIONAL PHYSIOGRAPHY AND GEOLOGY	The Subject Property is located along the western edge of the Great Valley geomorphic Province between the Coast Range Mountains to the west and the Sierra Nevada Mountains to the east. The Great Valley Geomorphic Province, including Sacramento and San Joaquin Valleys is a large alluvial plain approximately 400-miles long and 50-miles wide, extending through the center of California. The Sacramento Valley is a 5,000-square-mile alluvial basin that is drained primarily by the Sacramento River. The Vacaville portion of the Sacramento Valley is an extensive alluvial plain. The plain was formed by frequent overflow and deposition during periods of flooding (Faultline Associates, 1997).
REGIONAL HYDROGEOLOGY	The Subject Property is located in the Solano Subbasin, which lies in the southwestern portion of the Sacramento Basin and the northern portion of the Sacramento-San Joaquin Delta. The elevation varies from 120 feet in the northwest corner to sea level in the south. Subbasin boundaries are defined by Putah Creek on the north, the Sacramento River on the East (from Sacramento to Walnut Grove), the North Mokelumne River on the southeast (from Walnut Grove to the San Joaquin River), and the San Joaquin River on the South (from the North Mokelumne River to the Sacramento River. The western subbasin border is defined by the hydrologic divide that separates lands draining to the San Francisco Bay from those draining to the Sacramento-San Joaquin River Delta. That divide is roughly delineated by the English Hills and the Montezuma Hills (Department of Water Resources [DWR], 2004).

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Table 4-3 (cont.)
Regional Geology and Hydrogeology

PHYSICAL PARAMETER	INFORMATION/COMMENTS
DEPTH TO GROUNDWATER AND DIRECTION OF ANTICIPATED FLOW [1]	The Subject Property is located at an elevation of approximately 127 feet amsl. Based on data collected during Kleinfelder's *Brown Street Landfill Closure Certification Report* (Kleinfelder, 2001), groundwater was measured at 74.9 feet bgs. Fluctuations of the groundwater level, localized zones of perched water, and soil moisture content should be anticipated during and following the rainy season. Groundwater flow direction is based on regional information sources. Site-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other factors. Groundwater flow is assumed to be toward the south-southeast.
REGIONAL GROUNDWATER QUALITY PROBLEMS	Based upon Kleinfelder's review of sites listed in the EDR Radius Map™ Report with GeoCheck®, a regional groundwater quality problem was not identified.
WATER SUPPLY	Water supply is provided through the City of Vacaville.
FLOOD ZONE DESIGNATION	According to *The EDR Radius Map™ Report with GeoCheck®*, portions of the Subject Property are located within Special Flood Hazard Area of 1% and a within 0.2 % annual flood hazard (EDR, 2024a).
[1] Groundwater flow direction is based on regional information sources. Site-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other factors.	

4.5 USER PROVIDED INFORMATION

Kleinfelder understands the Subject Property is being considered for redevelopment. Information regarding the current owners/occupants of the Subject Property is summarized in Table 4-4.

Table 4-4
Owner / Occupant Information

ENTITY	NAME
OWNER	According to information provided by the Solano County Office of the Assessor, the Subject Property is owned by the City of Vacaville.
OCCUPANT(S)	The Subject Property is currently developed as Centennial Park.

Summaries of interviews of key individuals with knowledge of the Subject Property ("Key Subject Property Managers") are provided in Section 7. The following sections present information provided to Kleinfelder by EDR.

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4.5.1 Title Records

The Client did not provide a Chain of Title, and none was reviewed as part of this Phase I ESA.

4.5.2 Environmental Liens and Usage Limitations

Kleinfelder performed a lien search which did not identify environmental liens or other activity and use limitations (AULs) for the Subject Property. The lien search revealed that the most recent deed was recorded June 15, 2011, and vested title in City of Vacaville and a copy is included in the lien search report in Appendix C. According to information provided in EDR's regulatory agency database search report (EDR, 2024a), there are no liens pertaining to the Subject Property listed in the Federal Superfund Liens List maintained by USEPA, and no known recorded land-use environmental deed restrictions pertaining to the Subject Property listed in the State Liens Database. However, a respresentative for the City of Vacaville indicated there was an AUL associated with the Subject Property related to closure of the on-site landfill (Section 7.2). A copy of the *EDR Environmental Lien and AUL Search* report is included in Appendix C.

4.5.3 Value Reduction

As part of the ASTM Designation E1527-21 process, information is to be gathered regarding the prospective purchase price of the Subject Property relative to its fair market value. If there appears to be a value reduction, that reduction must be identified with respect to whether the difference could be attributed to environmental degradation of the property. This Phase I is not being conducted as part of a real estate transaction, therefore this information is not applicable.

4.5.4 Other Information/Documents Provided

Kleinfelder was provided with the following documents for the former Browns Street/Valley Landfill which are summarized below.

- Balbi & Chang Associates (BCA) prepared a *Report of Well Logging and Groundwater Analysis for Brown Street Landfill* dated June 15, 1994. BCA performed well logging, field obervations, and groundwater sampling for this invetigation.
    - BCA logged three soil borings (B-1 to a maximum depth of 145 feet bgs, B-2 to a maximum depth of 155 feet bgs, and B-3 to a maximum depth of 110 feet bgs) on April

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8, 1994 through April 15, 1994. Water was encountered in B-1 at 93 feet bgs. Water was not encountered in soil borings B-2 and B-3, although monitoring wells were installed in possible water-bearing zones.

- Geology at the Subject Property consisted of alluvial fan deposits of laterally and vertically discontinuous sections of clays, silts, sands, and gravels, and contain localized perched aquifers.

- On May 12, 1994, BCA collected a groundwater sample from well B-1. Analytical results were below detection limits for chlorinated volatile organics, semi-volatile organic compounds (SVOCs), biological oxygen demand (BOD), and chemical oxygen demand (COD).

- Kleinfelder prepared a *Construction Quality Assurance Plan* report for the City of Vacaville dated September 3, 1999. The plan was developed to use during the closure construction of the inactive landfill. A brief summary of the report sections is provided below.

  - Rough grading of the landfill surface – The existing landfill surface will be re-graded pursuant to the project plans.

  - Final cover of the landfill surface – Final cover soils will consist of fine-grained soils from the designated borrrow area located north of the landfill. Final cover layer will have a minimum compacted thickness of 24 inches.

  - Four proposed groundwater monitoring wells (B-1 through B-3 and B-2b) to be installed for water level measurement and water quality analysis.

  - Up to 10 landfill gas monitoring wells (GP-1 through GP-6) plus four additional wells requiring Solano County Department of Environmental Management approval.

  - Landscaping for erosion control – To protect the integrity of the landfill cap and the borrow area, the landfill cap will be hyroseeded with drought resistant grasses and wildflowers.

- Kleinfelder prepared a *Closure Certification Report* dated February 5, 2001 (Kleinfelder, 2001). This report summarizes the work that was completed during landfill closure activities.

  - Kleinfelder installed three landfill gas probes (GP-7, GP-8, and GP-9) to a total depth of 15 feet bgs. Gas samples were collected and analyzed for oxygen, nitrogen, carbon

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monoxide, carbon dioxide, and methane. Carbon monoxide and methane were not detected in the samples analyzed.

- Kleinfelder installed groundwater monitoring well B-2b to replace existing well B-2, which was dry. Monitoring well B-2b was installed to a maximum depth of approximately 89 feet bgs. Static water levels was measured at 74.9 feet bgs. On December 22, 1999, groundwater samples were collected from B-2b and analyzed for volatile organic compounds (VOCs), SVOCs, metals, lead, and mercury. Arsenic was detected at a concentration of 0.0841 milligrams per liter (mg/L), slightly above the Maximum Containment Level (MCL) of 0.05 mg/L, nickle was detected at a concentration of 0.34 mg/L, and dissolved iron was detected at 1.55 mg/L, above the secondary MCL of 0.3 mg/L. Kleinfelder concluded that based on the concentrations of iron detected in soil samples from monitoring well B-2b, the iron concentration in groundwater was considered background.

- An inspection was performed December 27, 2007 by Solono County Resource Mangement. Ambient air readings from the top of the landfill read 0.0 parts per million (ppm) methane. No violations were observed.

- An inspection was performed December 13, 2012 by Solono County Resource Mangement. Ambient air readings from the top of the landfill read 0.0 ppm methane. No violations were observed.

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5 HISTORY OF THE SUBJECT PROPERTY

The history of the Subject Property was researched to identify obvious uses. Historical land use was researched to the first developed use, or back to 1940, whichever was earlier or readily available. Table 5-1 summarizes the availability of information reviewed during this assessment.

Table 5-1
Historical Information Sources

SOURCE	YEARS REVIEWED	SOURCE / AVAILABILITY
SANBORN FIRE INSURANCE MAPS	Not available.	EDR, 2024d
AERIAL PHOTOGRAPHS	1937, 1952, 1968, 1974, 1984, 1993, 2006, 2009, 2012, 2016, and 2020	EDR, 2024e
CITY DIRECTORIES	1977 through 2020 (select years)	EDR, 2024f
HISTORICAL TOPOGRAPHIC MAP REPORT	1908, 1917, 1953, 1968, 1973, 1978/1980, 2012, 2015, 2018, and 2022	EDR, 2024g
BUILDING DEPARTMENT	2001 through 2024 Not available.	City of Vacaville Building Department EDR, 2024b
Tax Map	Not available	EDR, 2024h
PREVIOUS ASSESSMENT(S)	1992 and 1997	See Section 4.3.6

5.1 SANBORN FIRE INSURANCE MAPS

Sanborn Fire Insurance Maps provide historical land use information for some metropolitan areas and small, established towns. EDR responded stating Sanborn Fire Insurance Maps were not available for the Subject Property (EDR, 2024d).

5.2 AERIAL PHOTOGRAPHS

A review of historical aerial photography may indicate past activities at a property that may not be documented by other means or observed during a reconnaissance visit. The effectiveness of this

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technique depends on the scale and quality of the photographs and the available coverage. Aerial photographs were obtained from several historical photograph collections through EDR (2024e) and span a period of 83 years. A tabulation of the aerial photographs reviewed by Kleinfelder is presented in Table 5-2. Copies of the aerial photographs provided by EDR are included in Appendix D.

Table 5-2
Historical Aerial Photographs Reviewed

YEAR	APPROXIMATE SCALE	SUMMARY
1937	1" = 500'	**Subject Property:** The Subject Property appears to be vacant undeveloped land. The northwest corner of the Subject Property appears to be developed with a few structures, possible residences and barns, although difficult to discern. Horse Creek is shown flowing along the northeastern and central portions of the Subject Property. What appears to be an abandoned orchard is visible south of the structures. Agricultural activities are apparent in the southern portion of the Subject Property. **Surrounding Area:** The surrounding area appears vacant and undeveloped.
1952	1" = 500'	**Subject Property:** The southern portion of the Subject Property has been developed with a sewage disposal area. West of the sewage disposal area ground disturbance is apparent consistent with the former Vacaville landfill. The central portion of the Subject Property appears essentially unchanged from the 1937 aerial photograph. At least four small structures are apparent in the northwest corner of the Subject Property. The remnant orchard is no longer visible. **Surrounding Area:** The adjacent properties to the north, east, west, and south appear essentially unchanged from the 1937 aerial photograph. The adjacent property to the southeast appears to have been developed with two ponds likely related to the sewage disposal activities on the Subject Property, beyond are rural residential properties.
1968 1974	1" = 500'	**Subject Property:** The Subject Property appears essentially unchanged from the 1952 aerial photograph. The central portion of the Subject Property appears used for agricultural purposes. **Surrounding Area:** The two disposal ponds to the southeast are no longer present, and the Putah South Canal adjoins the Subject Property to the east, followed by Nut Tree Airport runway. By 1974, the Nut Tree Airport runway has been improved extending further to the northeast and an asphalt-paved parking lot for planes has been constructed. Unimproved Browns Valley Parkway is shown to the south. Residential development is apparent to the southwest.

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Table 5-2 (cont.)
Historical Aerial Photographs Reviewed

YEAR	APPROXIMATE SCALE	SUMMARY
1984	1" = 500'	**Subject Property:** The Subject Property appears essentially unchanged from the 1974 aerial photograph; however, the central portion of the Subject Property no longer appears used for agricultural purposes. **Surrounding Area:** The surrounding properties to the north, east, and south, appear similar to the 1974 aerial photograph. Ground disturbance activities are apparent on the western adjacent property, and although the railroad alignment is visible, it appears the tracks and other railroad-related appurtenances have been removed.
1993	1" = 500'	**Subject Property:** The sewage disposal area and landfill operations in the southern portion of the Subject Property and the structures in the northwest corner of the Subject Property are no longer apparent. **Surrounding Area:** A large single-family residential development is apparent adjacent to the west. Browns Valley Parkway has been improved adjacent to the south. A commercial / industrial property with exterior material and/or equipment storage is apparent adjacent to the north-northeast. Nut Tree Airport appears unchanged.
2006 2009 2012 2016 2020	1" = 500'	**Subject Property:** The southern portion of the Subject Property has been developed with baseball and soccer fields and asphalt-paved parking areas. A water retention pond appears along the southeastern Subject Property boundary. Allison Drive has been constructed to the south intersecting with Browns Valley Parkway before continuing to the interior of the Subject Property. **Surrounding Area:** The surrounding and adjacent properties appear similar previously reviewed aerially photographs; however, a new warehouse-style structure is apparent adjacent to the east of the northern portion of the Subject Property. By 2009, a church is apparent adjacent to the north-northwest and by 2016, a new large warehouse-style structure is adjacent to the east.

Note: Aerial photographs only provide information concerning indications of land use, and no conclusions regarding the release of hazardous substances or petroleum products can be drawn from the review of photographs alone.

5.3 CITY DIRECTORIES

City directories provide information regarding property occupants by address. EDR provided a city directory image, which is included in Appendix D, for the period between 1977 and 2020 (EDR, 2024f).

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The search of listings was performed for properties along Browns Valley Parkway and Allison Drive. Based on a review of listings, the Subject Property was occupied by the following:

270 Browns Valley Parkway

- 2020 – Centennial Park

Listings for properties that adjoin the Subject Property were also reviewed. A summary of off-site, non-residential adjoining listings is provided below:

North:

Allison Parkway

- Properties not listed in city directories.

East:

Cessna Drive

- Properties not listed in city directories.

South:

- No adjacent properties.

West:

- Single-family residential homes.

5.4 HISTORICAL TOPOGRAPHIC MAP REVIEW

Kleinfelder obtained information regarding historical topographic maps of the Subject Property vicinity from EDR (2024g). The topographic maps reviewed for this assessment are listed in Table 5-3 and copies of the maps are included in Appendix D.

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Table 5-3
Historical Topographic Maps Reviewed

YEAR	SCALE	SUMMARY
1908 1917	1:62,500 1:62,500	**Subject Property:** The Subject Property appears generally undeveloped vacant land. Two small structures are present in the southeast and northwest corners of the Subject Property, respectively. The northern portion of the Subject Property is labeled Violet. **Surrounding Area:** A Southern Pacific railroad track is depicted adjacent to the west and an unimproved and unlabeled road is adjacent to the south. The surrounding area appears rural residential with the exception of Vacaville center to the southwest, which appears densely developed.
1953 1968 1973	1:24,000 1:24,000 1:24,000	**Subject Property:** The southern portion of the Subject Property is developed and labeled as sewage disposal with two apparent aboveground storage tanks located to the west. The northwest corner of the Subject Property is developed with four structures and an unimproved road configured in an east to west orientation. By 1968, the two ASTs are no longer apparent and instead four small structures are depicted. **Surrounding Area:** The surrounding and adjacent properties to the north, west, east, and south appear undeveloped rural land. The adjacent property to the southeast appears associated with the sewage disposal operations with the depiction of two unlabeled ponds. Further to the southeast are apparent orchards. By 1968, Putah South Canal is depicted adjacent to the east, followed by Nut Tree Airport. A pit associated with quarry operations is depicted adjacent to the southwest, followed by dense residential development.
1978/1980	1:24,000	**Subject Property:** The Subject Property appears essentially unchanged from the 1973 topographic map; however, the four structures in the southwest corner of the Subject Property have been reduced to one structure. **Surrounding Area:** The surrounding and adjacent properties appear essentially unchanged from the 1973 topographic map, although the orchards are no longer depicted to the southeast and increased development is apparent.

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Table 5-3 (cont.)
Historical Topographic Maps Reviewed

YEAR	SCALE	SUMMARY
2012 2015 2018 2022	1:24,000 1:24,000 1:24,000 1:24,000	**Subject Property:** The 2012, 2015, 2018, and 2022 topographic maps depict physical features (i.e., roads and surface water), but do not depict structures. Horse Creek is depicted flowing through the central portion of the Subject Property. The sewage disposal area is depicted although no longer labeled. By 2018, an interior road is shown in the southern portion of the Subject Property consistent with present-day conditions. By 2022, the sewage disposal area is no longer depicted. **Surrounding Area:** The railroad is no longer depicted on the maps. Existing roads surrounding the Subject Property are shown, including Browns Valley Parkway, Allison Drive, and Allison Parkway, which appear in present-day configurations. A large single-family residential development is present adjacent to the west and southwest.

5.5 BUILDING DEPARTMENT

Permits were not found from the City of Vacaville Building Department, or the Solano County Building Department researched on March 14, 2024.

Kleinfelder additionally requested a building permit search by EDR (2024b), which did not find permits for the Subject Property.

5.6 PREVIOUS ASSESSMENTS

Kleinfelder was provided with an *Inactive Brown Street Landfill Final Closure Design Report* performed by Brian A. Stirrat & Associates in 1999. This report provides detailed descriptions for a predominantly non-irrigated vegetative cover providing erosion control and aesthetic enhancement for a passive recreational end-use of Centennial Park. The former Brown Street Landfill and borrow area encompasses approximately 13 acres in the western portion of the Subject Property. The borrow area is situated to the immediate north of the landfill. The former landfill had been utilized as a burn site until approximately 1957-1958 until it stopped accepting waste in 1966. Other previous assessment associated with former wastewater treatment area and Old City Landfill are discussed in Section 4.5.4.

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6 SITE RECONNAISSANCE

Kleinfelder's Phase I ESA activities included a site reconnaissance. This section summarizes the findings from the site reconnaissance.

6.1 METHODOLOGY AND LIMITING CONDITIONS

Mr. James Helge and Mrs. Erin Abendroth of Kleinfelder performed a site reconnaissance on March 24, 2024. The site reconnaissance included a visual inspection of the Subject Property to assist in identifying the presence or likely presence of hazardous substances or petroleum hydrocarbons under conditions that indicate an existing release, a past release, or threat of release into structures, soil, groundwater, or surface water at the Subject Property (i.e., RECs). Observations of readily apparent environmental conditions are summarized in Table 6-1, and color photographs of the Subject Property are presented in Figures 3 through 13. The approximate Subject Property boundaries are shown on Figure 2.

6.2 GENERAL PROPERTY SETTING

The Subject Property consists of four parcels of land assigned APNs 0129-220-030, 0129-220-040, 0129-220-050, and 0133-070-300 in the jurisdiction of the City of Vacaville. The Subject Property APNs are not assigned street addresses although Centennial Park is associated with the addresses 270 Browns Valley Parkway and 501 through 523 Browns Valley Parkway. The Subject Property is bound by Browns Valley Parkway to the south, Putah South canal to the east, commercial / industrial properties to the east-northeast and north, open space and Nut Tree Airport to the southeast, and a bike path followed by residential properties to the west in Solano County, California. The surrounding area is generally a mixture of residential and commercial properties.

6.3 PROPERTY OBSERVATIONS

Kleinfelder's Subject Property observations are summarized in Table 6-1.

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Table 6-1
Subject Property Observations

GENERAL OBSERVATIONS	REMARKS	OBSERVED	NOT OBSERVED
Current use	The Subject Property is developed as Centennial Park.	X	
Current use likely to indicate RECs			X
Past use	Vacaville Landfill and wastewater treatment facility.		X
Past use likely to indicate RECs	Former landfill and wastewater treatment areas.		X
Structures	A restroom building, storage/maintenance sheds, soccer canopy structure and facility building.	X	
Roads	Park access roads from Allison Drive in the south and from Allison Parkway in the north.	X	
Topography of Subject Property and surrounding area	Generally flat, but the Subject Property increases in elevation towards the north and west.	X	
Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		**Observed**	**Not Observed**
Aboveground storage tanks (ASTs)			X
Asbestos and lead	Not included in the scope of work.		X
Below grade vaults	Stormwater, municipal water, and PG&E related utility vaults.	X	
Burned or buried debris	Closed landfill on site. Observed capped area.	X	
Chemical storage	Various chemicals to maintain the restrooms and fertilizers to maintain athletic fields.	X	
Chemical mixing areas			X
Discolored soil or water			X
Ditches, streams	South, Middle, and North forks of Horse Creek.	X	
Drains and piping			X
Drums			X

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Table 6-1 (cont.)
Subject Property Observations

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Electrical or hydraulic equipment (polychlorinated biphenyls [PCBs])	Two pad-mounted transformers are located near soccer fields and one pad-mounted transformer is located near the baseball fields. A series of large electrical panels are located near the maintenance area by the soccer fields. No evidence of leakage was observed.	X	
Fill dirt from an unknown source	Several soil piles are observed in the northwest portion of the Subject Property	X	
Fill dirt from a known source			X
Hazardous chemical and petroleum products in connection with known use			X
Non-hazardous containers with contents	See Chemical Storage above.	X	
Hazardous waste storage			X
Heating and cooling system and fuel source			X
Industrial waste treatment equipment			X
Loading and unloading areas			X
Odors			X
Pits, ponds, or lagoons	A borrow pit from the former landfill and wastewater spreading zone which are now wetlands.	X	
Pools of liquid			X
Process wastewater			X
Sanitary sewer system	Utility provided by the City of Vacaville.	X	
Septic system (e.g., tank and leach fields)			X

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Table 6-1 (cont.)
Subject Property Observations

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Soil piles	Several soil piles that are grown over are present in the northwest portion of the Subject Property.	X	
Solid waste/evidence of unauthorized dumping	Concrete debris was observed at the southeastern portion of the Subject Property, near the former wastewater disposal ponds.	X	
Stained pavement, soil or concrete			X
Stains or corrosion (interior, non-water)			X
Storm drains/catch basins	Storm drains were observed within the parking lot areas.	X	
Stressed vegetation			X
Sumps and clarifiers			X
Surface water	Horse Creek and wetlands area.	X	X
UST(s) (including heating oil tanks)			X
Unidentified substance containers			X
Wastewater discharge			X
Water supplies (potable and process)	The Subject Property is serviced by municipal water.	X	
Wells (irrigation, monitoring, or domestic)	Monitoring wells observed near the former landfill and wastewater treatment area.	X	
Wells (dry)			X
Wells (oil and gas)			X

6.3 RESULTS OF SITE RECONNAISSANCE

The Subject Property consists of Centennial Park which consists of approximately 265 acres of open and developed park space. The developed portion includes four baseball fields, recreational trails, off-leash dog park areas, four tennis courts, five soccer fields, a restroom building, and asphalt paved parking

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areas in the south and an open space preserve in the north. Several soil piles are present in the northwest portion of the Subject Property and a concrete debris field was observed on the southeastern portion of the Subject Property. The origins of the piles/debris field are not known; however, the piles/debris field are vegetated indicating they have been present for more than one season. Horse Creek is present flowing from the northwest corner of the Subject Property through the central portion looping around to the southern portion of the Subject Property.

The Subject Property is bordered to the west by a bike trail followed by single-family homes, to the north by a church and industrial property, to the east by Putah South Canal and commercial / industrial properties, Nut Tree airport, and open space, and to the south by Browns Valley Parkway and open space. The Subject Property is relatively flat, although increases in elevation towards the north and west.

Groundwater monitoring wells were observed along Allison Drive in the eastern portion of the Subject Property and along the western recreational trails near the former landfill. Storm drains were present within the southcentral and southwestern parking areas. Pad-mounted transformers were observed near the soccer and baseball fields and appear in good condition. A borrow pit from the former landfill and wastewater spreading zone, which was also used as a stormwater retention pond, has formed into a wetland along the southeast Subject Property boundary. Two beaver dams were observed within the southern portion of Horse Creek.

Evidence of discolored water, stressed vegetation, other pits, or lagoons was not observed on the Subject Property during the reconnaissance.

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7 INTERVIEWS

Key Subject Property Managers were contacted to obtain current and historical environmental information concerning the Subject Property. The following sections highlight information revealed during the interviews.

7.1 INTERVIEW WITH CLIENT

A User Questionnaire was provided to the Client for information pertaining to the Subject Property. However, a User Questionnaire has not been received as of the date of this report.

7.2 INTERVIEW WITH OWNER/MANAGER/OCCUPANTS

An Interview Questionnaire was completed by Mr. Hew Hesterman, Parks Planner for the City of Vacaville, on March 20, 2024. Mr. Hesterman stated that portions of the Subject Property was previously used as a landfill, located in the southwest portion of the Subject Property, and as a wastewater treatment spreading zone, located in the southeast portion of the Subject Property. He noted that the wastewater was not chemically treated. Mr. Hesterman indicated that there is an AUL in place for the former landfill cap, which was constructed of a two-foot-thick clay layer. There are two maintenance areas used to store fertilizers and herbicides for the athletic fields, which are applied as needed and up to one to two times per year. A storm drain system is located in the parking lot and field areas that discharge to surface water. The restrooms discharge to the sanitary sewer.

7.3 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS

Information obtained from regulatory agencies contacted by Kleinfelder is discussed in Section 4.3.

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8 EVALUATION

Kleinfelder performed this Phase I ESA of the Subject Property consistent with the scope and limitations of ASTM Designation E1527-21. The following sections describe Kleinfelder's findings and provide general background information about the Subject Property. Findings address RECs, HRECs, CRECs, and notation of *de minimis* quantities, as applicable to the Subject Property. In summary, Kleinfelder's assessment revealed the following information concerning the Subject Property:

- The Subject Property as Centennial Park which comprises four parcels of approximately 265-acres, identified by the Solano County Assessor as APNs 0133-070-300, 0129-220-030, 0129-220-040, and 0129-220-050. Street addresses are not assigned to the parcels; however, Centennial Park is associated with 270 Browns Valley Parkway and 501 through 523 Browns Valley Parkway in the City of Vacaville, Solano County, California.

- The Subject Property consists of open and developed park space. The developed portion includes four baseball fields, recreational trails, off-leash dog park areas, four tennis courts, five soccer fields and associated structure, a restroom building, a maintenance area, and asphalt-paved parking areas in the south and an open space preserve in the north. During the site reconnaissance, groundwater monitoring wells were observed along Allison Drive in the eastern portion of the Subject Property and along the western recreational trails near the former landfill. Storm drains were present within the southcentral and southwestern parking areas. Several soil piles are present in the northwest portion of the Subject Property and a concrete debris field was observed on the southeastern portion of the Subject Property. The origins of the piles/debris field are not known. Pad-mounted transformers were observed near the soccer and baseball fields and appear in good condition. A stormwater retention pond located along the southeast Subject Property boundary has formed into a wetland. Two beaver dams were observed within the southern portion of Horse Creek.

- Based on historical records reviewed, the Subject Property was developed as early as 1937 with a residential-sized structure in the northwest corner of the Subject Property. Agricultural activities were noted on various portions of the Subject Property between at least 1937 and 19By at least 1952, a landfill and sewage treatment area were located in the southwestern and southern portions of the Subject Property, respectively. By 1993, both the landfill and sewage treatment area appeared closed. Between 1993 and 2006, the southern portion of the Subject Property was redeveloped as Centennial Park with recreational trails and athletic fields. The

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landfill on the Subject Property was reportedly closed with an AUL in place, although Kleinfelder has not been able to obtain a copy of the AUL to verify. Based on the presence of a AUL for the Subject Property, the historical use of the Subject Property for as a landfill and sewage treatment area represents a CREC.

- The surrounding area was adjoined by a railroad from at least 1908 through 1980, and developed as mostly rural residential and agricultural until 1968, when Nut Tree Airport was constructed to the southeast. A single-family residential development adjacent to the west and commercial / industrial properties to the north were constructed by 1993. The Subject Property is adjoined to the north by a church and industrial property followed by commercial / industrial properties and to the east-northeast by commercial / industrial properties and Nut Tree Airport. The Subject Property is adjoined to the south by Browns Valley Parkway followed by vacant land. The Subject Property is adjoined to the west by single-family residential properties.

- The Subject Property is listed under the name Brown Sheet [Street] Landfill AKA Old Vacaville Landfill as a land disposal site. According to GeoTracker™, the cleanup status is listed as open as of January 1, 1965; however, according to reviewed documents, the landfill was closed in 1999. As noted above the former Landfill is considered a CREC.

8.1 DEVIATIONS AND ADDITIONAL SERVICES

The scope of this Phase I ESA does not incorporate ASTM Standard non-scope considerations, such as ACMs, radon, LBP, lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality/vapor intrusion, and high-voltage power lines.

8.2 CONCLUSIONS AND RECOMMENDATIONS

Kleinfelder has performed a Phase I ESA, in conformance with the scope of services required by ASTM Designation E1527-21, our Proposal No. Proposal No. M2401424.001P_REV2/SAC24P162447R2 dated February 26, 2024, and limitations discussed in this report. Exceptions to and deviations from this practice are described in Section 8.1 of this report.

Based on the results of the Phase I ESA, the following RECs, CRECs, HRECs, *de minimis* conditions, and/or significant data gaps were identified for the Subject Property:

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RECs

- The soil piles of unknown origin located in the northwest portion of the Subject Property.

CRECs

- The closed Vacaville landfill and former wastewater disposal area located in the southern portion of the Subject Property.

Business Environmental Risk (BER)

Although not considered a REC pursuant to ASTM Standard E 1527-21, the following BER has been identified:

- Agricultural use of the Subject Property from at least 1937 until at least 1974. It is common for residual concentrations of agrichemicals, including pesticides, arsenic, and lead associated with application for pest control, to be present in the shallow soils on agricultural sites. The pesticide concentrations in these situations are typically less than regulatory action levels, and the potential for further action to be required to address the pesticides is low.
- The presence of concrete debris at the southeastern portion of the Subject Property.

Based on the findings and conclusions of this Phase I ESA, Kleinfelder has the following recommendations for further assessment.

- Surficial soil sampling for OCPs, herbicides, and metals to assess impacts due to historical agricultural on-site activities.
- Sampling of soil piles on northern portion of Subject Property.
- Location of the AUL documentation associated with landfill.
- Removal of the concrete debris.

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8.3 DATA GAPS

Kleinfelder attempted to obtain reasonably ascertainable information regarding the Subject Property consistent with ASTM Standard E1527-21. Despite good faith efforts by the environmental professional(s) to gather the necessary information, data gaps, a lack of information, or inability to obtain information as required by the ASTM Standard, were encountered during the completion of this Phase I ESA.

- A completed User Questionnaire has not been received as of the date of this report.
- Gaps in historical sources greater than five years (i.e., topographic maps from 1980 to 2012 and aerial photographs from 1937 to 1952 and from 1993 to 2006).
- AUL documentation.

The lack of a completed User Questionnaire and gaps in historical sources are not considered significant data gaps based on other information obtained for the Subject Property. The lack of verification of the reported AUL is considered a significant data gap.

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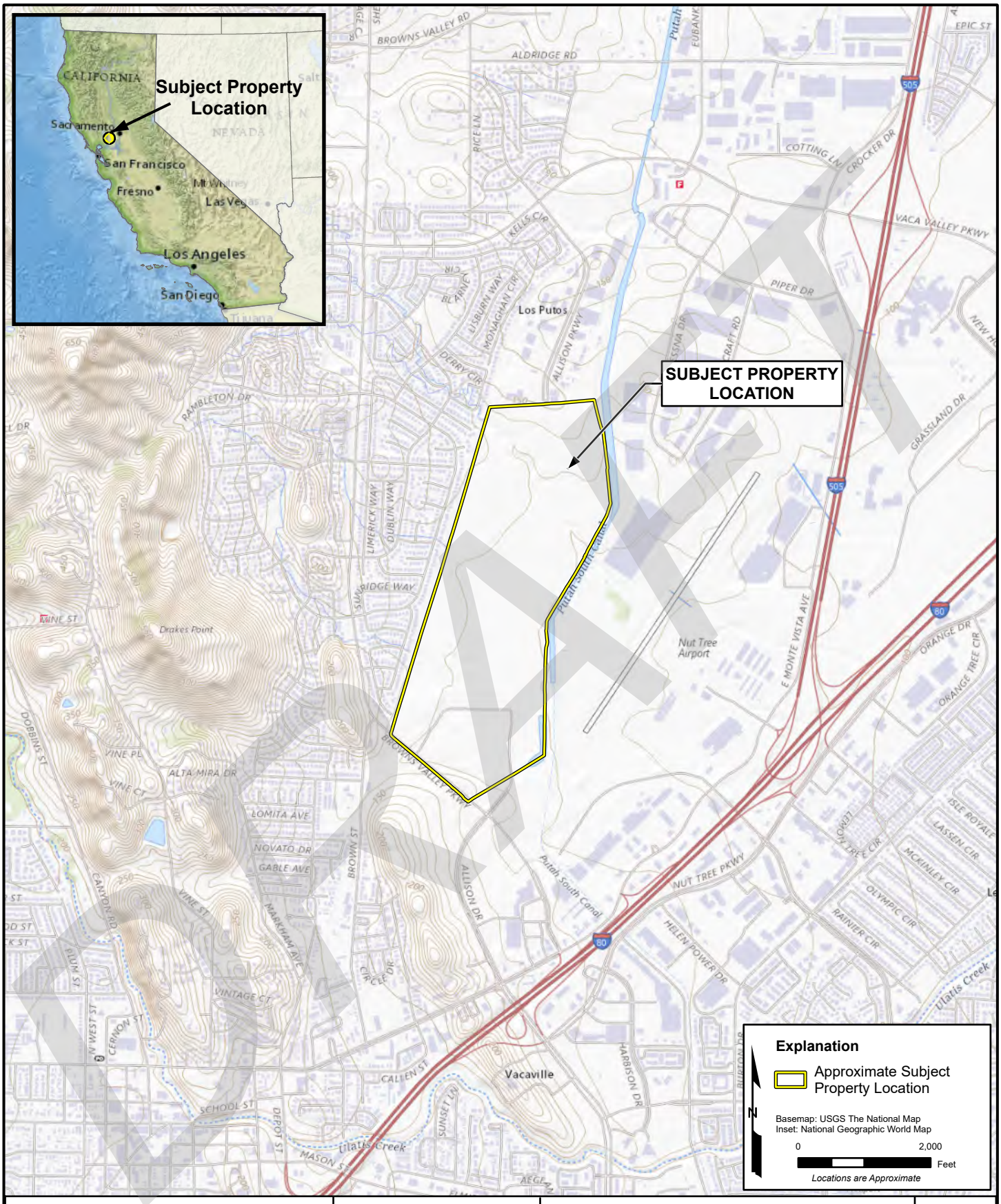
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FIGURES

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PLOTTED: 4/8/2024 5:06 PM, KHagan



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Bright People. Right Solutions.

PROJECT:	24005105.001A
DRAWN:	APR 2024
DRAWN BY:	K. HAGAN
CHECKED BY:	S. BIRARDI
FILE NAME:	CentennialPark_F1.pagx

SUBJECT PROPERTY LOCATION MAP

PHASE I ENVIRONMENTAL SITE ASSESSMENT
CENTENNIAL PARK
270 BROWNS VALLEY PARKWAY
VACAVILLE, SOLANO COUNTY, CALIFORNIA

FIGURE
1

PLOTTED: 4/15/2024 4:56 PM, KHagan

Overhead Electric Utility Line

Residential

ALLISON PARKWAY

PUTAH SOUTH

New Hope Christian Fellowship Church 4910 Allison Parkway

WillScot Sacramento 4911 Allison Parkway

North Bay Distribution 2050 Cessna Drive

Soil Piles

Public Utility Easement

PG&E Easement

Automatic Bar Controls, Inc. 2060 Cessna Drive Suite 100

Horse Creek

APN 0133070300

Residential

SHANNON DRIVE

Pacific Cycle, Inc. 2070 Cessna Drive

Residential

APN 0129220030

APN 0129220040

Beaver Dams

Horse Creek

Dog Park

Approximate Location of Former Brown Street Landfill / Old Vacaville Landfill

Soccer Fields

Canopy Structure

Facility Building

Connex Boxes

Electrical Panels

Nut Tree Airport 301 County Airport Road

APN 0129220050

Stormwater Retention Pond / Wetland

Tennis Courts

BROWNS VALLEY PARKWAY

Concrete Debris

Restroom Facility

Baseball Fields

Approximate Location of Former Wastewater Disposal Ponds 501 Browns Valley Parkway

ALLISON DRIVE

Explanation

- Groundwater Monitoring Well
- Pad-mounted Transformer
- Assessor's Parcel Boundary
- Approximate Subject Property Boundary

N

Service Layer Credits: World Imagery: Yolo County, Maxar; Maxar Vivid image date 9/5/2023.

0 300 600 Feet

Locations are Approximate

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CHECKED BY:	S. BIRARDI
FILE NAME:	CentennialPark_F2.pagx

SUBJECT PROPERTY VICINITY MAP

PHASE I ENVIRONMENTAL SITE ASSESSMENT
CENTENNIAL PARK
270 BROWNS VALLEY PARKWAY
VACAVILLE, SOLANO COUNTY, CALIFORNIA

FIGURE
2



Photograph 1 - View from the southwesternmost Subject Property parking area, looking west-southwest towards Browns Valley Parkway and adjacent residential properties.



Photograph 2 - View from southwestern parking area of the Subject Property, looking north at the former location of Vacaville landfill. Tennis courts are shown to the right of the photograph.

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KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 24005105.001A DRAWN BY: S.BIRARDI CHECKED BY: J.HELGE DATE: 4/4/2024 REVISED:	SUBJECT PROPERTY PHOTOGRAPHS PHASE I ENVIRONMENTAL SITE ASSESSMENT CENTENNIAL PARK 270 BROWNS VALLEY PARKWAY VACAVILLE, SOLANO COUNTY, CA	FIGURE 3



Photograph 3 - View from southwestern portion of the Subject Property, looking north at former location of Vacaville landfill. Tennis courts are just out of frame to the right (east) of the photograph.



Photograph 4 - View from the top of the former landfill, looking east toward the dog park (left of photograph) and baseball fields (right of photograph).

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Photograph 5 - View of groundwater monitoring well located along the western portion of the Subject Property near the former landfill.



Photograph 6 - View of the restroom facility located in the southern portion of the Subject Property near the baseball fields.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 24005105.001A DRAWN BY: S.BIRARDI CHECKED BY: J.HELGE DATE: 4/4/2024 REVISED:	SUBJECT PROPERTY PHOTOGRAPHS PHASE I ENVIRONMENTAL SITE ASSESSMENT CENTENNIAL PARK 270 BROWNS VALLEY PARKWAY VACAVILLE, SOLANO COUNTY, CA	FIGURE 5

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Photograph 7 - View of pad-mounted transformer located west of the baseball fields.



Photograph 8 - View of a maintenance area centrally located in between the soccer fields in the central portion of the Subject Property.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 24005105.001A DRAWN BY: S.BIRARDI CHECKED BY: J.HELGE DATE: 4/4/2024 REVISED:	SUBJECT PROPERTY PHOTOGRAPHS PHASE I ENVIRONMENTAL SITE ASSESSMENT CENTENNIAL PARK 270 BROWNS VALLEY PARKWAY VACAVILLE, SOLANO COUNTY, CA	FIGURE 6



Photograph 9 - View of pad-mounted transformer located within the maintenance area.



Photograph 10 - View from just east of the soccer fields, looking south toward the wetlands.

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Photograph 11 - View of the stormwater retention pond / wetland located along the eastern boundary of the Subject Property.



Photograph 12 - View of the southern segment of Horse Creek.

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Photograph 13 - View from the southernmost Subject Property parking area, looking south towards Browns Valley Parkway and adjacent rural land. Storm drain is shown in the center of the photograph.



Photograph 14 - Typical view of the northern portion of the Subject Property, looking east.

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KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 24005105.001A DRAWN BY: S.BIRARDI CHECKED BY: J.HELGE DATE: 4/4/2024 REVISED:	SUBJECT PROPERTY PHOTOGRAPHS PHASE I ENVIRONMENTAL SITE ASSESSMENT CENTENNIAL PARK 270 BROWNS VALLEY PARKWAY VACAVILLE, SOLANO COUNTY, CA	FIGURE 9



Photograph 15 - View of from interior Allison Drive, looking northwest toward the baseball fields. Concrete debris observed in the center of the photograph.



Photograph 16 - View of electrical control box and stormwater/sewer manhole located off site near the southeast portion of the Subject Property, looking east toward Nut Tree Airport.

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KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 24005105.001A DRAWN BY: S.BIRARDI CHECKED BY: J.HELGE DATE: 4/4/2024 REVISED:	SUBJECT PROPERTY PHOTOGRAPHS PHASE I ENVIRONMENTAL SITE ASSESSMENT CENTENNIAL PARK 270 BROWNS VALLEY PARKWAY VACAVILLE, SOLANO COUNTY, CA	FIGURE 10



Photograph 17 - View of Putah South canal followed by eastern adjacent commercial / industrial properties, looking northeast.



Photograph 18 - View of the northern segment of Horse Creek, looking west toward the adjacent residential properties.

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KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 24005105.001A DRAWN BY: S.BIRARDI CHECKED BY: J.HELGE DATE: 4/4/2024 REVISED:	SUBJECT PROPERTY PHOTOGRAPHS PHASE I ENVIRONMENTAL SITE ASSESSMENT CENTENNIAL PARK 270 BROWNS VALLEY PARKWAY VACAVILLE, SOLANO COUNTY, CA	FIGURE 11



Photograph 19 - View of a beaver dam located in Horse Creek.



Photograph 20 - View of Browns Valley Parkway and Allison Drive intersection from the southern entrance to the Subject Property, looking west.

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KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 24005105.001A DRAWN BY: S.BIRARDI CHECKED BY: J.HELGE DATE: 4/4/2024 REVISED:	SUBJECT PROPERTY PHOTOGRAPHS PHASE I ENVIRONMENTAL SITE ASSESSMENT CENTENNIAL PARK 270 BROWNS VALLEY PARKWAY VACAVILLE, SOLANO COUNTY, CA	FIGURE 12



Photograph 21 - View of small soil piles located in the northern portion of the Subject Property. Larger soil piles located in the background (north) of the photograph.



Photograph 22 - View of the larger soil piles located in the northern portion of the Subject Property.

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APPENDIX A

STATEMENT OF QUALIFICATIONS

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STATEMENT OF QUALIFICATIONS

We declare that to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all-appropriate inquiries in conformance with the standards and practices set forth in CFR Part 312.

_____

Stefan J. Birardi
Environmental Professional

_____

James Helge, PMP
Principal Environmental Scientist

_____

Lizanne Simmons, PG 7431
Senior Principal Geologist

The resumes of above-listed environmental professionals performing this Phase I ESA are on file at the Kleinfelder office and are available on request.

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APPENDIX B

REGULATORY AGENCY DATABASE REPORT

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Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688

Inquiry Number: 7593477.2s
March 12, 2024

The EDR Radius Map™ Report with GeoCheck®

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6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

270 BROWNS VALLEY PARKWAY
VACAVILLE, CA 95688

COORDINATES

Latitude (North):	38.3790740 - 38° 22' 44.66''
Longitude (West):	121.9701770 - 121° 58' 12.63''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	589951.7
UTM Y (Meters):	4248171.0
Elevation:	127 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	50006299 ALLENDALE, CA
Version Date:	2022
South Map:	50006321 ELMIRA, CA
Version Date:	2022
Southwest Map:	50005533 FAIRFIELD NORTH, CA
Version Date:	2021
Northwest Map:	50004722 MOUNT VACA, CA
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200528
Source:	USDA

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MAPPED SITES SUMMARY

Target Property Address:
270 BROWNS VALLEY PARKWAY
VACAVILLE, CA 95688

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	VACAVILLE LANDFILL (	BROWNS VALLEY ROAD	SWF/LF	Lower	1 ft.
2	QUICK LANE OF VACAVI	2001 ALLISON DR	CERS HAZ WASTE, CERS TANKS, CERS	Lower	1 ft.
3	CLEANHOME ASSOCIATES	543 SHANNON DR	EDR Hist Cleaner	Higher	144, 0.027, NW
4	DAVIS SPIRIT	179 SUNCREST WAY	EDR Hist Auto	Higher	311, 0.059, WSW
A5	WILLIAMS SCOTSMAN	4911 ALLISON PKWY	RCRA NonGen / NLR	Higher	374, 0.071, NNE
A6	SYNDER FILTRATION		PFAS RCRA MANIFEST	Higher	429, 0.081, NNE
B7	VACAVILLE FRUIT COMP	2055 CESSNA DR STE 2	RCRA NonGen / NLR	Higher	785, 0.149, NE
B8	GUY YOCOM CONSTRUCTI	2040 CESSNA DR.	RCRA NonGen / NLR	Higher	786, 0.149, NE
9	NICK PAPPIN TRUCKING	NUT TREE RD	UST, SWEEPS UST	Lower	879, 0.166, ESE
C10	STATE COMPENSATION I	2051 CESSNA DR	CERS HAZ WASTE, HWTS, CERS	Higher	937, 0.177, NE
C11	STATE COMPENSATION I	2051 CESSNA DR	RCRA NonGen / NLR	Higher	937, 0.177, NE
D12	AUTOMATIC BAR CONTRO	2060 CESSNA DR STE 1	CERS HAZ WASTE, CERS	Higher	996, 0.189, NE
D13	AUTOMATIC BAR CONTRO	2060 CESSNA DRIVE	RCRA-VSQG	Higher	996, 0.189, NE
D14	AUTOMATIC BAR CONTRO	2060 CESSNA DR STE 1	RCRA NonGen / NLR	Higher	996, 0.189, NE
E15	COURT GALVANIZING, I	4937 ALLISON PKWY	CERS HAZ WASTE, CERS	Higher	1036, 0.196, NNE
E16	COURT GALVANIZING IN	4937 ALLISON PKWY	CERS TANKS, HWTS, HAZNET	Higher	1036, 0.196, NNE
E17	COURT GALVANIZING, I	4937 ALLISON PARKWAY	RCRA-LQG, ENVIROSTOR, NPDES, CIWQS	Higher	1036, 0.196, NNE
F18	MARKHAM ELEMENTARY	101 MARKHAM AVE	RCRA NonGen / NLR	Higher	1041, 0.197, SW
F19	VACAVILLE UNIFIED SC	101 MARKHAM AVE	RCRA NonGen / NLR	Higher	1041, 0.197, SW
E20	COURT GALVANIZING IN		PFAS ECHO	Higher	1059, 0.201, NNE
E21	PG&E: VACAVILLE GRID	4940 ALLISON PKWY	CERS TANKS, CERS	Higher	1066, 0.202, NNE
E22	PG&E: VACAVILLE GRID	4940 ALLISON PKWY	AST	Higher	1066, 0.202, NNE
F23	LYNNEDAE FRANCE	196 MARKHAM AVE.	RCRA NonGen / NLR	Higher	1078, 0.204, SW
24	NUT TREE RAILROAD	NUT TREE RD	CA FID UST	Lower	1213, 0.230, SSE
G25	MAINT DEPT (VACAVILL	353 BROWN ST	UST FINDER RELEASE	Higher	2029, 0.384, SSW
G26	VACAVILLE UNIFIED SC	353 BROWN ST	LUST, SWEEPS UST, CA FID UST, Cortese, CERS	Higher	2029, 0.384, SSW
G27	VACAVILLE UNIFIED SC	353 BROWN ST	LUST, UST, Cortese	Higher	2029, 0.384, SSW
G28	VACAVILLE USD YARD C	353 BROWN ST	UST FINDER RELEASE	Higher	2029, 0.384, SSW
G29	MAINTENANCE DEPARTME	353 BROWN	LUST, HIST UST, HIST CORTESE, HWTS, HAZNET, NPDES,...	Higher	2029, 0.384, SSW
H30	SHELL SERVICE STATIO	1611 E MONTE VISTA	RCRA-SQG, LUST, FINDS, ECHO, HWTS, HAZNET, CERS	Higher	2030, 0.384, SSE
H31	SHELL	1611 MONTE VISTA AVE	UST FINDER RELEASE	Higher	2030, 0.384, SSE
H32	SHELL CASE #2	1611 E. MONTE VISTA	UST FINDER RELEASE	Higher	2030, 0.384, SSE
H33	SHELL	1611 MONTE VISTA AVE	LUST, Cortese, HIST CORTESE, CIWQS, CERS	Higher	2030, 0.384, SSE
H34	SHELL CASE #2	1611 E. MONTE VISTA	LUST, Cortese	Higher	2030, 0.384, SSE
I35	K MART	130 BROWN VALLEY PKW	UST FINDER RELEASE	Higher	2148, 0.407, South
I36	K MART	130 BROWN VALLEY PKW	LUST, Cortese, HIST CORTESE, CERS	Higher	2148, 0.407, South
J37	CHEVRON	1615 MONTE VISTA AVE	LUST, Cortese, HIST CORTESE, CERS	Lower	2174, 0.412, SSE
J38	CHEVRON #1386	1615 E MONTE VISTA A	LUST	Lower	2174, 0.412, SSE
J39	CHEVRON	1615 EAST MONTE VIST	Notify 65	Lower	2174, 0.412, SSE

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MAPPED SITES SUMMARY

Target Property Address:
270 BROWNS VALLEY PARKWAY
VACAVILLE, CA 95688

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
J40	CHEVRON	1615 MONTE VISTA AVE	UST FINDER RELEASE	Lower	2174, 0.412, SSE
41	WABCO CALIF REPAIR C	4977 ALLISON PARKWAY	RCRA-SQG, CPS-SLIC	Higher	2190, 0.415, NNE
K42	BP SERVICE STATION #	1491 E MONTE VISTA A	LUST, CERS HAZ WASTE, SWEEPS UST, HIST UST, CA FID...	Higher	2554, 0.484, South
K43	THRIFTY (BP)	1491 MONTE VISTA AVE	LUST, Cortese, HIST CORTESE, CERS	Higher	2554, 0.484, South
K44	THRIFTY (BP)	1491 MONTE VISTA AVE	UST FINDER RELEASE	Higher	2554, 0.484, South
K45	BEACON, NUT TREE	1501 EAST MONTE VIST	UST FINDER RELEASE	Higher	2559, 0.485, South
K46	BEACON, NUT TREE	1501 EAST MONTE VIST	LUST	Higher	2559, 0.485, South
K47	BEACON NUT TREE STAT	1501 EAST MONTE VIST	LUST, CERS HAZ WASTE, SWEEPS UST, CERS TANKS, CA...	Higher	2559, 0.485, South
48	KNOWN	1330 CALLEN STREET	Notify 65	Higher	2840, 0.538, South
49	ELEMENTARY SCHOOL 2C	6975 BROWNS VALLEY R	ENVIROSTOR, SCH	Higher	4712, 0.892, NNW
50	SPRIG CIRCUITS, INC.	765-A EUBANKS DRIVE	RCRA-LQG, ENVIROSTOR	Lower	4969, 0.941, NNE

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EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-SQG ---------- RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

Federal ERNS list

ERNS ---------- Emergency Response Notification System

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EXECUTIVE SUMMARY

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE ---------- State Response Sites

Lists of state and tribal leaking storage tanks

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST ---------- Underground Storage Tank Listing
INDIAN UST ---------- Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---------- Waste Management Unit Database
SWRCY ---------- Recycler Database
HAULERS ---------- Registered Waste Tire Haulers Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---------- Historical Calsites Database
SCH ---------- School Property Evaluation Program
CDL ---------- Clandestine Drug Labs
Toxic Pits ---------- Toxic Pits Cleanup Act Sites
US CDL ---------- National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

HIST UST ---------- Hazardous Substance Storage Container Database

Local Land Records

LIENS ---------- Environmental Liens Listing

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LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
MINES MRDS	Mineral Resources Data System
FINDS	Facility Index System/Facility Registry System
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS TRIS	List of PFAS Added to the TRI

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PFAS ATSDR ..... PFAS Contamination Site Location Listing
PFAS WQP ..... Ambient Environmental Sampling for PFAS
PFAS NPDES ..... Clean Water Act Discharge Monitoring Information
PFAS ECHO FIRE TRAINING ..... Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT ..... All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC ..... Aqueous Foam Related Incidents Listing
BIOSOLIDS ..... ICIS-NPDES Biosolids Facility Data
PFAS ..... PFAS Contamination Site Location Listing
AQUEOUS FOAM ..... Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN ..... Bond Expenditure Plan
CHROME PLATING ..... Chrome Plating Facilities Listing
CUPA Listings ..... CUPA Resources List
DRYCLEANERS ..... Cleaner Facilities
EMI ..... Emissions Inventory Data
ENF ..... Enforcement Action Listing
Financial Assurance ..... Financial Assurance Information Listing
ICE ..... Inspection, Compliance and Enforcement
HWP ..... EnviroStor Permitted Facilities Listing
HWT ..... Registered Hazardous Waste Transporter Database
HWTS ..... Hazardous Waste Tracking System
HAZNET ..... Facility and Manifest Data
MINES ..... Mines Site Location Listing
MWMP ..... Medical Waste Management Program Listing
NPDES ..... NPDES Permits Listing
PEST LIC ..... Pesticide Regulation Licenses Listing
PROC ..... Certified Processors Database
HAZMAT ..... Hazardous Material Facilities
UIC ..... UIC Listing
UIC GEO ..... UIC GEO (GEOTRACKER)
WASTEWATER PITS ..... Oil Wastewater Pits Listing
WDS ..... Waste Discharge System
WIP ..... Well Investigation Program Case List
MILITARY PRIV SITES ..... MILITARY PRIV SITES (GEOTRACKER)
PROJECT ..... PROJECT (GEOTRACKER)
WDR ..... Waste Discharge Requirements Listing
CIWQS ..... California Integrated Water Quality System
CERS ..... CERS
NON-CASE INFO ..... NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ..... OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ..... PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ..... SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ..... Well Stimulation Project (GEOTRACKER)
UST FINDER ..... UST Finder Database

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ..... EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ..... Recovered Government Archive Solid Waste Facilities List

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EXECUTIVE SUMMARY

RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/04/2023 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COURT GALVANIZING, I EPA ID:: CAL000126952	***4937 ALLISON PARKWAY***	***NNE 1/8 - 1/4 (0.196 mi.)***	***E17***	***71***

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 12/04/2023 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AUTOMATIC BAR CONTRO EPA ID:: CAR000354860	2060 CESSNA DRIVE	NE 1/8 - 1/4 (0.189 mi.)	D13	37

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EXECUTIVE SUMMARY

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/23/2023 has revealed that there are 3 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COURT GALVANIZING, I	***4937 ALLISON PARKWAY***	***NNE 1/8 - 1/4 (0.196 mi.)***	***E17***	***71***
Status: Inactive - Needs Evaluation Facility Id: 71003336				
ELEMENTARY SCHOOL 2C	***6975 BROWNS VALLEY R***	***NNW 1/2 - 1 (0.892 mi.)***	***49***	***196***
Status: Certified Facility Id: 48010003				

Lower Elevation	Address	Direction / Distance	Map ID	Page
SPRIG CIRCUITS, INC.	***765-A EUBANKS DRIVE***	***NNE 1/2 - 1 (0.941 mi.)***	***50***	***204***
Status: Inactive - Needs Evaluation Facility Id: 71002695				

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
VACAVILLE LANDFILL (	BROWNS VALLEY ROAD	0 - 1/8 (0.000 mi.)	1	9
Database: SWF/LF (SWIS), Date of Government Version: 11/06/2023 Facility ID: 48-CR-0002 Operational Status: Closed Regulation Status: Unpermitted				

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Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 13 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VACAVILLE UNIFIED SC	***353 BROWN ST***	***SSW 1/4 - 1/2 (0.384 mi.)***	***G26***	***96***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Status: Case Closed				
VACAVILLE UNIFIED SC	***353 BROWN ST***	***SSW 1/4 - 1/2 (0.384 mi.)***	***G27***	***99***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Status: Case Closed				
MAINTENANCE DEPARTME	***353 BROWN***	***SSW 1/4 - 1/2 (0.384 mi.)***	***G29***	***102***
Database: LUST, Date of Government Version: 12/04/2023 Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019 Status: Completed - Case Closed Facility Id: 50076 Global Id: T0609500445 Global Id: T0609500362 Facility Status: I				
SHELL SERVICE STATIO	***1611 E MONTE VISTA***	***SSE 1/4 - 1/2 (0.384 mi.)***	***H30***	***118***
Database: LUST, Date of Government Version: 12/04/2023 Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019 Status: Completed - Case Closed Facility Id: 50037 Global Id: T0609518478 Facility Status: I				
SHELL	***1611 MONTE VISTA AVE***	***SSE 1/4 - 1/2 (0.384 mi.)***	***H33***	***134***
Database: LUST, Date of Government Version: 12/04/2023 Database: LUST REG 5, Date of Government Version: 07/01/2008 Status: Case Closed Status: Completed - Case Closed Global Id: T0609500355				
SHELL CASE #2	***1611 E. MONTE VISTA***	***SSE 1/4 - 1/2 (0.384 mi.)***	***H34***	***137***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Status: Pollution Characterization				
K MART	***130 BROWN VALLEY PKW***	***S 1/4 - 1/2 (0.407 mi.)***	***I36***	***139***
Database: LUST, Date of Government Version: 12/04/2023 Database: LUST REG 5, Date of Government Version: 07/01/2008 Status: Case Closed Status: Completed - Case Closed Global Id: T0609500387				
BP SERVICE STATION #	***1491 E MONTE VISTA A***	***S 1/4 - 1/2 (0.484 mi.)***	***K42***	***152***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019 Facility Id: 50059 Facility Status: I				
THRIFTY (BP)	***1491 MONTE VISTA AVE***	***S 1/4 - 1/2 (0.484 mi.)***	***K43***	***163***
Database: LUST, Date of Government Version: 12/04/2023 Database: LUST REG 5, Date of Government Version: 07/01/2008				

DRAFT

Status: Case Closed
Status: Completed - Case Closed
Global Id: T0609500389

BEACON, NUT TREE	1501 EAST MONTE VIST	S 1/4 - 1/2 (0.485 mi.)	K46	167

Database: LUST REG 5, Date of Government Version: 07/01/2008
Status: Remedial action (cleanup) Underway

BEACON NUT TREE STAT	***1501 EAST MONTE VIST***	***S 1/4 - 1/2 (0.485 mi.)***	***K47***	***167***

Database: LUST, Date of Government Version: 12/04/2023
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019
Status: Open - Site Assessment
Facility Id: 50082
Global Id: T0609548562
Facility Status: I

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON	***1615 MONTE VISTA AVE***	***SSE 1/4 - 1/2 (0.412 mi.)***	***J37***	***141***

Database: LUST, Date of Government Version: 12/04/2023
Database: LUST REG 5, Date of Government Version: 07/01/2008
Status: Remedial action (cleanup) Underway
Status: Completed - Case Closed
Global Id: T0609500353

CHEVRON #1386	1615 E MONTE VISTA A	SSE 1/4 - 1/2 (0.412 mi.)	J38	147

Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019
Facility Id: 50009
Facility Status: I

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there is 1 CPS-SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WABCO CALIF REPAIR C	***4977 ALLISON PARKWAY***	***NNE 1/4 - 1/2 (0.415 mi.)***	***41***	***149***

Database: SLIC REG 5, Date of Government Version: 04/01/2005

Lists of state and tribal registered storage tanks

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NICK PAPPIN TRUCKING	***NUT TREE RD***	***ESE 1/8 - 1/4 (0.166 mi.)***	***9***	***24***

Database: SOLANO CO. UST, Date of Government Version: 09/15/2021

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EXECUTIVE SUMMARY

Facility Id: 80120
Facility Status: I

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PG&E: VACAVILLE GRID	4940 ALLISON PKWY	NNE 1/8 - 1/4 (0.202 mi.)	E22	92
Database: AST, Date of Government Version: 07/06/2016				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/16/2023 has revealed that there are 4 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STATE COMPENSATION I	***2051 CESSNA DR***	***NE 1/8 - 1/4 (0.177 mi.)***	***C10***	***24***
AUTOMATIC BAR CONTRO	***2060 CESSNA DR STE 1***	***NE 1/8 - 1/4 (0.189 mi.)***	***D12***	***30***
COURT GALVANIZING, I	***4937 ALLISON PKWY***	***NNE 1/8 - 1/4 (0.196 mi.)***	***E15***	***41***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
QUICK LANE OF VACAVI	***2001 ALLISON DR***	***0 - 1/8 (0.000 mi.)***	***2***	***11***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NICK PAPPIN TRUCKING	***NUT TREE RD***	***ESE 1/8 - 1/4 (0.166 mi.)***	***9***	***24***
Comp Number: 80120				

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EXECUTIVE SUMMARY

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NUT TREE RAILROAD Facility Id: 48002163 Status: A Status: I	NUT TREE RD	SSE 1/8 - 1/4 (0.230 mi.)	24	95

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 10/16/2023 has revealed that there are 3 CERS TANKS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COURT GALVANIZING IN	***4937 ALLISON PKWY***	***NNE 1/8 - 1/4 (0.196 mi.)***	***E16***	***55***
PG&E: VACAVILLE GRID	***4940 ALLISON PKWY***	***NNE 1/8 - 1/4 (0.202 mi.)***	***E21***	***89***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
QUICK LANE OF VACAVI	***2001 ALLISON DR***	***0 - 1/8 (0.000 mi.)***	***2***	***11***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/04/2023 has revealed that there are 8 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WILLIAMS SCOTSMAN EPA ID:: CAL000354713	4911 ALLISON PKWY	NNE 0 - 1/8 (0.071 mi.)	A5	16
VACAVILLE FRUIT COMP EPA ID:: CAL000452577	2055 CESSNA DR STE 2	NE 1/8 - 1/4 (0.149 mi.)	B7	19
GUY YOCOM CONSTRUCTI EPA ID:: CAC003262328	2040 CESSNA DR.	NE 1/8 - 1/4 (0.149 mi.)	B8	21
STATE COMPENSATION I EPA ID:: CAL000371114	2051 CESSNA DR	NE 1/8 - 1/4 (0.177 mi.)	C11	28
AUTOMATIC BAR CONTRO EPA ID:: CAL000428261	2060 CESSNA DR STE 1	NE 1/8 - 1/4 (0.189 mi.)	D14	39
MARKHAM ELEMENTARY	101 MARKHAM AVE	SW 1/8 - 1/4 (0.197 mi.)	F18	83

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EPA ID:: CAL000446413				
VACAVILLE UNIFIED SC EPA ID:: CAL000003452	101 MARKHAM AVE	SW 1/8 - 1/4 (0.197 mi.)	F19	85
LYNNEDAE FRANCE EPA ID:: CAC003020184	196 MARKHAM AVE.	SW 1/8 - 1/4 (0.204 mi.)	F23	93

PFAS RCRA MANIFEST: To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

A review of the PFAS RCRA MANIFEST list, as provided by EDR, and dated 12/28/2023 has revealed that there is 1 PFAS RCRA MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SYNDER FILTRATION		NNE 0 - 1/8 (0.081 mi.)	A6	18

PFAS ECHO: Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

A review of the PFAS ECHO list, as provided by EDR, and dated 12/28/2023 has revealed that there is 1 PFAS ECHO site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COURT GALVANIZING IN		NNE 1/8 - 1/4 (0.201 mi.)	E20	87

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 12/13/2023 has revealed that there are 8 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VACAVILLE UNIFIED SC Cleanup Status: COMPLETED - CASE CLOSED	***353 BROWN ST***	***SSW 1/4 - 1/2 (0.384 mi.)***	***G26***	***96***
VACAVILLE UNIFIED SC Cleanup Status: COMPLETED - CASE CLOSED	***353 BROWN ST***	***SSW 1/4 - 1/2 (0.384 mi.)***	***G27***	***99***
SHELL Cleanup Status: COMPLETED - CASE CLOSED	***1611 MONTE VISTA AVE***	***SSE 1/4 - 1/2 (0.384 mi.)***	***H33***	***134***
SHELL CASE #2 Cleanup Status: COMPLETED - CASE CLOSED	***1611 E. MONTE VISTA***	***SSE 1/4 - 1/2 (0.384 mi.)***	***H34***	***137***
K MART Cleanup Status: COMPLETED - CASE CLOSED	***130 BROWN VALLEY PKW***	***S 1/4 - 1/2 (0.407 mi.)***	***I36***	***139***
THRIFTY (BP)	***1491 MONTE VISTA AVE***	***S 1/4 - 1/2 (0.484 mi.)***	***K43***	***163***

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Cleanup Status: COMPLETED - CASE CLOSED

BEACON NUT TREE STAT	***1501 EAST MONTE VIST***	***S 1/4 - 1/2 (0.485 mi.)***	***K47***	***167***

Cleanup Status: OPEN - SITE ASSESSMENT

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON	***1615 MONTE VISTA AVE***	***SSE 1/4 - 1/2 (0.412 mi.)***	***J37***	***141***

Cleanup Status: COMPLETED - CASE CLOSED

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 6 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MAINTENANCE DEPARTME	***353 BROWN***	***SSW 1/4 - 1/2 (0.384 mi.)***	***G29***	***102***
Reg Id: 480104				
Reg Id: 480209				
SHELL	***1611 MONTE VISTA AVE***	***SSE 1/4 - 1/2 (0.384 mi.)***	***H33***	***134***
Reg Id: 480095				
K MART	***130 BROWN VALLEY PKW***	***S 1/4 - 1/2 (0.407 mi.)***	***I36***	***139***
Reg Id: 480139				
THRIFTY (BP)	***1491 MONTE VISTA AVE***	***S 1/4 - 1/2 (0.484 mi.)***	***K43***	***163***
Reg Id: 480141				
BEACON NUT TREE STAT	***1501 EAST MONTE VIST***	***S 1/4 - 1/2 (0.485 mi.)***	***K47***	***167***
Reg Id: 480153				

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON	***1615 MONTE VISTA AVE***	***SSE 1/4 - 1/2 (0.412 mi.)***	***J37***	***141***
Reg Id: 480090				

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/06/2023 has revealed that there are 3 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MAINTENANCE DEPARTME	***353 BROWN***	***SSW 1/4 - 1/2 (0.384 mi.)***	***G29***	***102***
KNOWN	1330 CALLEN STREET	S 1/2 - 1 (0.538 mi.)	48	196

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON	1615 EAST MONTE VIST	SSE 1/4 - 1/2 (0.412 mi.)	J39	148

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UST FINDER RELEASE: US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

A review of the UST FINDER RELEASE list, as provided by EDR, and dated 06/08/2023 has revealed that there are 8 UST FINDER RELEASE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MAINT DEPT (VACAVILL	353 BROWN ST	SSW 1/4 - 1/2 (0.384 mi.)	G25	96
VACAVILLE USD YARD C	353 BROWN ST	SSW 1/4 - 1/2 (0.384 mi.)	G28	101
SHELL	1611 MONTE VISTA AVE	SSE 1/4 - 1/2 (0.384 mi.)	H31	132
SHELL CASE #2	1611 E. MONTE VISTA	SSE 1/4 - 1/2 (0.384 mi.)	H32	133
K MART	130 BROWN VALLEY PKW	S 1/4 - 1/2 (0.407 mi.)	I35	138
THRIFTY (BP)	1491 MONTE VISTA AVE	S 1/4 - 1/2 (0.484 mi.)	K44	165
BEACON, NUT TREE	1501 EAST MONTE VIST	S 1/4 - 1/2 (0.485 mi.)	K45	166

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON	1615 MONTE VISTA AVE	SSE 1/4 - 1/2 (0.412 mi.)	J40	148

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DAVIS SPIRIT	179 SUNCREST WAY	WSW 0 - 1/8 (0.059 mi.)	4	16

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist

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EXECUTIVE SUMMARY

Cleaner site within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CLEANHOME ASSOCIATES	543 SHANNON DR	NW 0 - 1/8 (0.027 mi.)	3	16

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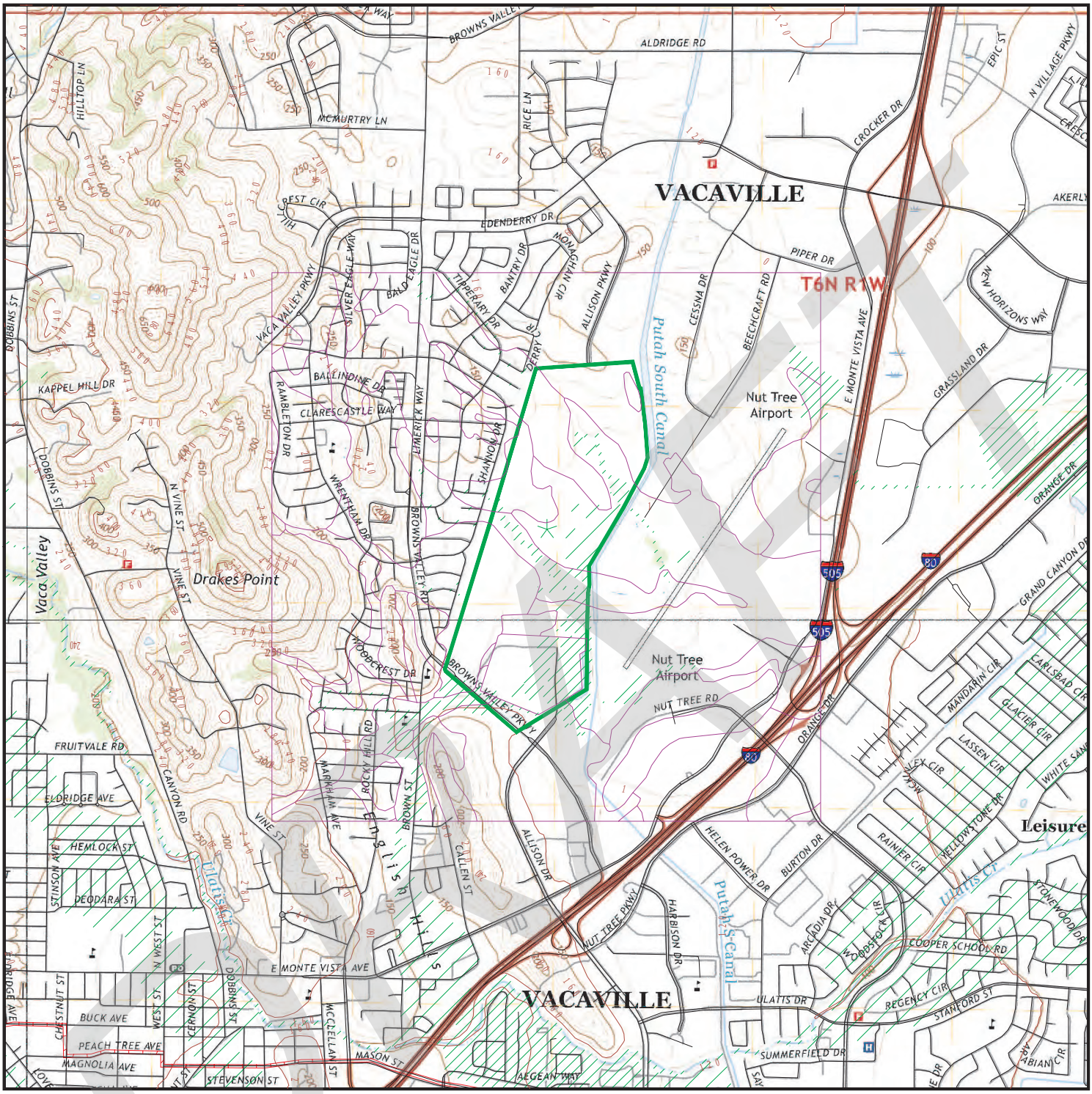
EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
CENTENNIAL PARK TRAIL DEV	CIWQS

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OVERVIEW MAP - 7593477.2S



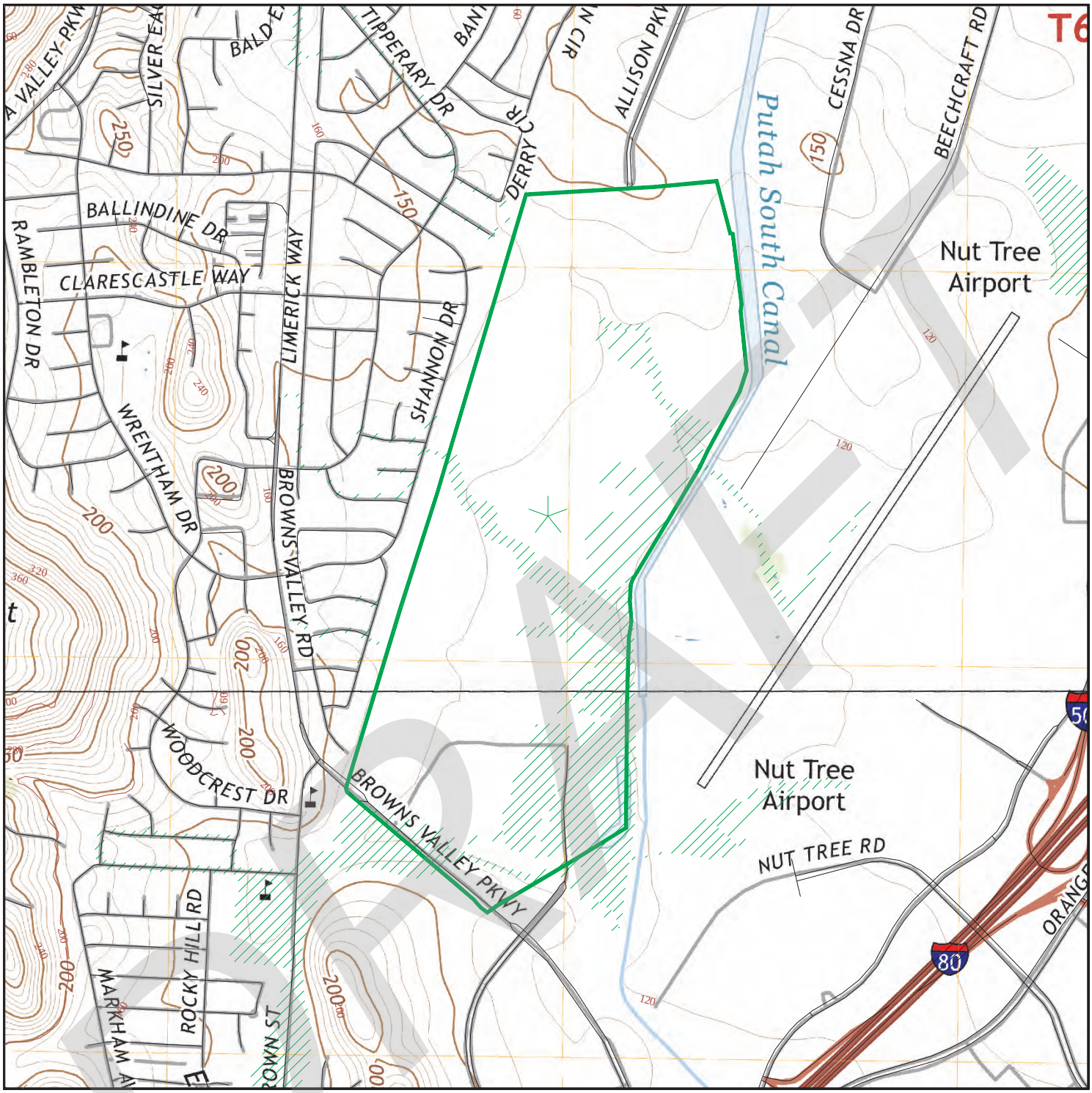
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Centennial Park	CLIENT:	Kleinfelder, Inc.
ADDRESS:	270 Browns Valley Parkway Vacaville CA 95688	CONTACT:	Stefan Birardi
LAT/LONG:	38.379074 / 121.970177	INQUIRY #:	7593477.2s
		DATE:	March 12, 2024 5:21 pm

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DETAIL MAP - 7593477.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Centennial Park	CLIENT: Kleinfelder, Inc.
ADDRESS: 270 Browns Valley Parkway Vacaville CA 95688	CONTACT: Stefan Birardi
LAT/LONG: 38.379074 / 121.970177	INQUIRY #: 7593477.2s DATE: March 12, 2024 5:23 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	1	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	1	0	2	NR	3
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		1	0	0	NR	NR	1

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	0	13	NR	NR	13
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	1	NR	NR	1
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	1	NR	NR	NR	1
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		1	3	NR	NR	NR	4
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	1	NR	NR	NR	1
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	1	NR	NR	NR	1
CERS TANKS	0.250		1	2	NR	NR	NR	3
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	7	NR	NR	NR	8
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		1	0	NR	NR	NR	1
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	1	NR	NR	NR	1
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	TP		NR	NR	NR	NR	NR	0
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
CHROME PLATING	0.500		0	0	0	NR	NR	0
Cortese	0.500		0	0	8	NR	NR	8
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	6	NR	NR	6
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	2	1	NR	3
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	8	NR	NR	8
UST FINDER	0.250		0	0	NR	NR	NR	0

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		1	NR	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	7	20	38	3	0	68

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

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1 **VACAVILLE LANDFILL (OLD)** **SWF/LF** **S102362726**
BROWNS VALLEY ROAD **N/A**
< 1/8 **VACAVILLE, CA 95688**
1 ft.

Relative:
Lower

Actual:
126 ft.

SWF/LF (SWIS):

Name:	VACAVILLE LANDFILL (OLD)
Address:	BROWNS VALLEY ROAD
City,State,Zip:	VACAVILLE, CA 95688
Region:	STATE
Facility ID:	48-CR-0002
SWIS Number:	48-CR-0002
Point of Contact:	Dawn Liang
Is Archived:	No
Is Closed Illegal Abandoned:	Yes
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Operational Status:	Closed
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	C1
EPA Federal Registry ID:	Not reported
ARB District:	Yolo-Solano
SWRCB Region:	Central Valley
Local Government:	Vacaville
Reporting Agency Legal Name:	County of Solano
Reporting Agency Department:	Department of Resource Management
Enforcing Agency Legal Name:	County of Solano
Enforcing Agency Department:	Department of Resource Management
Regulation Status:	Unpermitted

Activity:

SWIS Number:	48-CR-0002
Site Name:	Vacaville Landfill (Old)
Activity:	Solid Waste Disposal Site
Activity Is Archived:	No
Category:	Disposal
Activity Classification:	Solid Waste Disposal Site
WDR Number:	Not reported
WDR Landfill Class:	Not reported
Cease Operation:	Not reported
Cease Operation Type:	Not reported
Inspection Frequency:	Annual
Throughput:	0
Throughput Units:	Not reported
Remaining Capacity:	0
Remaining Capacity Date:	Not reported
Capacity:	0
Capacity Units:	Not reported
Total Acreage:	0
Disposal Acreage:	0
Permitted Elevation:	0
Permitted Elevation Type:	Not reported
Permitted Depth:	0
Permitted Depth Type:	Not reported
Point of Contact:	Dawn Liang
Site Operational Status:	Closed
Site Regulatory Status:	Unpermitted
Site Is Archived:	No
Is Closed Illegal Abandoned:	Yes

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VACAVILLE LANDFILL (OLD) (Continued) **S102362726**

Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	C1
EPA Federal Registry ID:	Not reported
County:	Solano
ARB District:	Yolo-Solano
SWRCB Region:	Central Valley
Local Government:	Vacaville
Street Address:	Browns Valley Road
City:	Vacaville
State:	CA
ZIP Code:	95688
Reporting Agency Legal Name:	County of Solano
Reporting Agency Department:	Department of Resource Management
Enforcing Agency Legal Name:	County of Solano
Enforcing Agency Department:	Department of Resource Management

Operator:

SWIS Number:	48-CR-0002
Site Name:	Vacaville Landfill (Old)
Site Operational Status:	Closed
Site Type:	Disposal Only
Site Regulatory Status:	Unpermitted
Latitude:	38.37417
Longitude:	-121.9744
Is Archived:	No
Operator:	City Of Vacaville Public Works/Util
Started On:	Not reported
Contact Name:	Grover Wright
Contact Title:	Util Oper Superintendent
Contact Email:	Not reported
Contact Phone:	(707) 499-6263
Street Address:	PO Box 220
Operator City:	Elmira
Operator State:	CA
Operator Zip:	95625

Owner:

SWIS Number:	48-CR-0002
Owner:	City Of Vacaville Public Works/Util
Owner Address:	PO Box 220
Owner City:	Elmira
Owner State:	CA
Owner Zip:	95625
Site Name:	Vacaville Landfill (Old)
Site Operational Status:	Closed
Site Type:	Disposal Only
Site Regulatory Status:	Unpermitted
Latitude:	38.37417
Longitude:	-121.9744
Is Archived:	No
Started On:	Not reported
Contact Name:	Grover Wright
Contact Title:	Util Oper Superintendent

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VACAVILLE LANDFILL (OLD) (Continued) **S102362726**

Contact Email: Not reported
Contact Phone: (707) 499-6263

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2 **QUICK LANE OF VACAVILLE** **CERS HAZ WASTE** **S122492070**
2001 ALLISON DR **CERS TANKS** **N/A**
< 1/8 **VACAVILLE, CA 95688** **CERS**
1 ft.

Relative: Lower
Actual: 123 ft.

CERS HAZ WASTE:
Name: QUICK LANE OF VACAVILLE
Address: 2001 ALLISON DR
City,State,Zip: VACAVILLE, CA 95688
Site ID: 439415
CERS ID: 10765162
CERS Description: Hazardous Waste Generator

CERS TANKS:
Name: QUICK LANE OF VACAVILLE
Address: 2001 ALLISON DR
City,State,Zip: VACAVILLE, CA 95688
Site ID: 439415
CERS ID: 10765162
CERS Description: Aboveground Petroleum Storage

CERS:
Name: QUICK LANE OF VACAVILLE
Address: 2001 ALLISON DR
City,State,Zip: VACAVILLE, CA 95688
Site ID: 439415
CERS ID: 10765162
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 439415
Site Name: Quick Lane of Vacaville
Violation Date: 10-17-2018
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Operations/Maintenance - General
Violation Notes: Not reported
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 439415
Site Name: Quick Lane of Vacaville
Violation Date: 08-02-2023
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description: Failure to report program data electronically.
Violation Notes: Update the Owner’s ID page.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 439415

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QUICK LANE OF VACAVILLE (Continued) **S122492070**

Site Name:	Quick Lane of Vacaville
Violation Date:	08-02-2023
Citation:	HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Description:	Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.
Violation Notes:	Remove Paint related Waste drum. Send copy of manifest to: Max Clark at mgclark@solanocounty.com.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	439415
Site Name:	Quick Lane of Vacaville
Violation Date:	08-02-2023
Citation:	HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description:	Failure to address in the SPCC Plan the type of oil and storage capacity for each fixed container. For mobile or portable containers, either provide the type of oil and storage capacity, or an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities.
Violation Notes:	The volumes for the SPCC and for the CERS submittal are not accurate. Update the accurate volume to the SPCC and to CERS. Complete all by Sept05.2023.
Violation Division:	Solano County Environmental Health
Violation Program:	APSA
Violation Source:	CERS,
Site ID:	439415
Site Name:	Quick Lane of Vacaville
Violation Date:	08-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Add the following to the HazMat/Waste Inventory: 1. Oily Debris (contaminated Absorbent).
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	439415
Site Name:	Quick Lane of Vacaville
Violation Date:	08-02-2023
Citation:	22 CCR 12 66262.34(e) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(e)
Violation Description:	Failure to meet the following conditions of satellite accumulation regulations: Accumulate up to 55 gallons of hazardous waste or one

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QUICK LANE OF VACAVILLE (Continued) **S122492070**

quart of acute hazardous waste at or near the initial point of accumulation which was under the control of the operator. Total time hazardous waste can be accumulated onsite in any generator accumulation area is one year, i.e., the combined accmulation time at a satellite accumulation point and at a 90/180/270 accumulation area (depending on size of generator and distance transported), whichever comes first. The generator complies with section 66265.171, 66265.172, and 66265.173(a). The container must be clearly marked with the initial date that hazardous waste is first placed in the container and labelled with the words Hazardous Waste including specified information Container must be labelled with the date the satellite accumulation limit is reached and moved within three days after reaching the 55 gallon (or one quart) limit to a 90 day accumulation area 55 gallons (or one quart of acute hazardous waste) of waste per process may be accumulated

Violation Notes: Label container for draining Used Oil Filters as Satellite HazWaste Storage. This container has 1 year to transfer its contents to the Main HazWaste Storage Tank. (put Start Date on it).
Violation Division: Solano County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 439415
Site Name: Quick Lane of Vacaville
Violation Date: 08-02-2023
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Label the Haz Waste Containers in a proper manner. Label Daily Empty containers in a proper manner. Send photocopies to Max Clark at mgclark@solanocounty.com.
Violation Division: Solano County Environmental Health
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-02-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Match volumes of tank capacities for SPCC and submittal to CERS.
Eval Division: Solano County Environmental Health
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-17-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

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QUICK LANE OF VACAVILLE (Continued) **S122492070**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-02-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Label HazWaste containers properly and Satellite HazWaste conytainers with accumulation date. (1 year). Remove Paint Related Waste drum. Send copies of labeling and manifest (for Paint removal) to: Max Clark at mgclark@solanocounty. Note: Keep manifests accurate for what is being removed as HazWaste. Training rosters are used. Retain records for 3 years on site at a time.
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-17-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-17-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-02-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Add the Oily Debris (Contaminated Absorbent) to the HazMat Inventory. Update the Owner’s ID page. Complete all by Sept05.2023.
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Solano County Env Health
Entity Title: Not reported
Affiliation Address: 675 Texas Street, Suite 5500
Affiliation City: Fairfield
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94533
Affiliation Phone: (707) 784-6765,

Affiliation Type Desc: Document Preparer
Entity Name: KPA, LLC
Entity Title: Not reported
Affiliation Address: Not reported

DRAFT

QUICK LANE OF VACAVILLE (Continued) **S122492070**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2001 Allison Drive
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95687
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	RICH BEDOYA
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 249-3719,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Quick Lane of Vacaville
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Peter Spitzer
Entity Title:	Not reported
Affiliation Address:	1320 N First Street
Affiliation City:	Dixon
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95620
Affiliation Phone:	(916) 416-0683,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Curtis Vinson
Entity Title:	Not reported
Affiliation Address:	1320 N First Street
Affiliation City:	Dixon
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95687
Affiliation Phone:	,

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3
NW
< 1/8
0.027 mi.
144 ft.

CLEANHOME ASSOCIATES
543 SHANNON DR
VACAVILLE, CA 95688

EDR Hist Cleaner **1019957939**
N/A

Relative:
Higher

Actual:
139 ft.

EDR Hist Cleaner

Year:	Name:	Type:
2007	CLEANHOME ASSOCIATES	Drycleaning Plants, Except Rugs, NEC
2008	CLEANHOME ASSOCIATES	Drycleaning Plants, Except Rugs, NEC

4
WSW
< 1/8
0.059 mi.
311 ft.

DAVIS SPIRIT
179 SUNCREST WAY
VACAVILLE, CA 95688

EDR Hist Auto **1020728369**
N/A

Relative:
Higher

Actual:
136 ft.

EDR Hist Auto

Year:	Name:	Type:
2009	DAVIS SPIRIT	Gasoline Service Stations
2010	DAVIS SPIRIT	Gasoline Service Stations
2011	DAVIS SPIRIT	Gasoline Service Stations
2012	DAVIS SPIRIT	Gasoline Service Stations
2013	DAVIS SPIRIT	Gasoline Service Stations
2014	DAVIS SPIRIT	Gasoline Service Stations

A5
NNE
< 1/8
0.071 mi.
374 ft.

WILLIAMS SCOTSMAN
4911 ALLISON PKWY
VACAVILLE, CA 95688

Site 1 of 2 in cluster A

RCRA NonGen / NLR **1024826652**
CAL000354713

Relative:
Higher

Actual:
148 ft.

RCRA Listings:

Date Form Received by Agency:	20100715
Handler Name:	Williams Scotsman
Handler Address:	4911 ALLISON PKWY
Handler City,State,Zip:	VACAVILLE, CA 95688-9346
EPA ID:	CAL000354713
Contact Name:	GABRIELE HOLDEN
Contact Address:	4911 ALLISON PKWY
Contact City,State,Zip:	VACAVILLE, CA 95688
Contact Telephone:	707-451-3000
Contact Fax:	707-451-4000
Contact Email:	GABRIELE.HOLDEN@WILLSCOT.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	4911 ALLISON PKWY
Mailing City,State,Zip:	VACAVILLE, CA 95688-9346

DRAFT

WILLIAMS SCOTSMAN (Continued) **1024826652**

Owner Name:	Williams Scotsman
Owner Type:	Other
Operator Name:	Gabriele Holden
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: GABRIELE HOLDEN	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4911 ALLISON PKWY
Owner/Operator City,State,Zip:	VACAVILLE, CA 95688
Owner/Operator Telephone:	707-451-3000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported

DRAFT

WILLIAMS SCOTSMAN (Continued) **1024826652**

Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: WILLIAMS SCOTSMAN
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 901 S BOND STREET, SUITE 600
Owner/Operator City,State,Zip: BALTIMORE, MD 21231-3357
Owner/Operator Telephone: 800-638-6963
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20100715
Handler Name: WILLIAMS SCOTSMAN
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 23521
NAICS Description: PAINTING AND WALL COVERING CONTRACTORS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

A6 **SYNDER FILTRATION** **PFAS RCRA MANIFEST** **1027317975**
NNE **N/A**
< 1/8 **VACAVILLE, CA**
0.081 mi.
429 ft. **Site 2 of 2 in cluster A**

Relative:
Higher

Actual:
148 ft.

PFAS RCRA MANIFEST:
EPA ID: CAR000314310
Name: SYNDER FILTRATION
Address: Not reported
City,State,Zip: VACAVILLE, CA
Latitude: 38.387691
Longitude: -121.967615
Date Received: 2020-12-08 00:00:00
Management Method Description: STORAGE, BULKING AND/OR TRANSFER OFF SITE
EJSCREEN report: https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-121.967615,%22y%22:38.387691,%22spatialReference%22:%7B%22w

DRAFT

SYNDER FILTRATION (Continued) **1027317975**

kid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

DES Facility ID:	NVD980895338
DES Facility Name:	21st Century Environmental Management of Nevada, LLC
DES Facility City:	Fernley
DES Facility State:	NV
DES Latitude:	39.610253
DES Longitude:	-119.203094
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-119.203094,%22y%22:39.610253,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
Manifest ID:	21191246
Waste Line ID:	39808830
Waste Line Number:	2
COI Only:	N
DOT Hazardous:	Y
DOT ID Number Description:	NA3082
DOT Printed Information:	NA3082 HAZARDOUS WASTE, LIQUID, N.O.S. (PERFLUOROBUTYLETHYL IODIDE, HIGHER PERFLUORO COMPOUNDS) III 9
Non Hazardous Waste Description:	-
Waste Line Handling:	-
Waste Residue Comments:	-
Manifest Handling:	3)1700145-00 171 LP # 3 4)1700146-00 LP # 4 1)1700143-00 153 LP # 1 2)1700144-00 171 LP # 2 5)1693713-00 132 ACETIC ACID, GLACIAL 7)1694052-00 NON PCB BALLAST 6)1694051-00 128 COMMODITY PACK PAINT RELATED MATERIAL
State Waste Codes:	551
Quantity KG:	5.4421799999999996
Date Shipped:	2020-11-23 00:00:00
Date Certified:	2020-12-18 00:00:00

B7 **VACAVILLE FRUIT COMPANY INC** **RCRA NonGen / NLR** **1026056390**
NE **2055 CESSNA DR STE 200** **CAL000452577**
1/8-1/4 **VACAVILLE, CA 95688**
0.149 mi.
785 ft. **Site 1 of 2 in cluster B**

Relative: **Higher**
Actual: **132 ft.**

RCRA Listings:

Date Form Received by Agency:	20200206
Handler Name:	Vacaville Fruit Company Inc
Handler Address:	2055 CESSNA DR STE 200
Handler City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAL000452577
Contact Name:	GINA ATWOOD
Contact Address:	2055 CESSNA DR STE 200
Contact City,State,Zip:	VACAVILLE, CA 95688
Contact Telephone:	707-448-5292
Contact Fax:	707-447-1085
Contact Email:	GINA@VACAVILLEFRUIT.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported

DRAFT

VACAVILLE FRUIT COMPANY INC (Continued) **1026056390**

State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2055 CESSNA DR STE 200
Mailing City,State,Zip:	VACAVILLE, CA 95688
Owner Name:	Nicole Ciarabellini
Owner Type:	Other
Operator Name:	Gina Atwood
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200210
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: GINA ATWOOD	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2055 CESSNA DR STE 200

DRAFT

VACAVILLE FRUIT COMPANY INC (Continued) **1026056390**

Owner/Operator City,State,Zip: VACAVILLE, CA 95688
Owner/Operator Telephone: 707-448-5292
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: NICOLE CIARABELLINI
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 2055 CESSNA DR STE 200
Owner/Operator City,State,Zip: VACAVILLE, CA 95688
Owner/Operator Telephone: 707-448-5292
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20200206
Handler Name: VACAVILLE FRUIT COMPANY INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 311999
NAICS Description: ALL OTHER MISCELLANEOUS FOOD MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B8 **GUY YOCOM CONSTRUCTION INC.** **RCRA NonGen / NLR** **1028900526**
NE **2040 CESSNA DR.** **CAC003262328**
1/8-1/4 **VACAVILLE, CA 95688**
0.149 mi.
786 ft. **Site 2 of 2 in cluster B**

Relative: Higher
Actual: 136 ft.

RCRA Listings:
Date Form Received by Agency: 20231127
Handler Name: Guy Yocom Construction Inc.
Handler Address: 2040 CESSNA DR.
Handler City,State,Zip: VACAVILLE, CA 95688
EPA ID: CAC003262328
Contact Name: DEREK MARTIN

DRAFT

GUY YOCOM CONSTRUCTION INC. (Continued) **1028900526**

Contact Address:	3299 HORSELESS CARRIAGE RD. STE. H
Contact City,State,Zip:	NORCO, CA 92860
Contact Telephone:	909-841-8434
Contact Fax:	Not reported
Contact Email:	DMARTIN@YOCOMINC.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	3299 HORSELESS CARRIAGE RD. STE. H
Mailing City,State,Zip:	NORCO, CA 92860
Owner Name:	Guy Yocom Construction Inc.
Owner Type:	Other
Operator Name:	Derek Martin
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20231128
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No

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GUY YOCOM CONSTRUCTION INC. (Continued) **1028900526**

Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: GUY YOCOM CONSTRUCTION INC.
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 3299 HORSELESS CARRIAGE RD. STE. H
Owner/Operator City,State,Zip: NORCO, CA 92860
Owner/Operator Telephone: 951-284-3456
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: DEREK MARTIN
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 3299 HORSELESS CARRIAGE RD. STE. H
Owner/Operator City,State,Zip: NORCO, CA 92860
Owner/Operator Telephone: 909-841-8434
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20231127
Handler Name: GUY YOCOM CONSTRUCTION INC.
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 238110
NAICS Description: POURED CONCRETE FOUNDATION AND STRUCTURE CONTRACTORS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

DRAFT

9 **NICK PAPPIN TRUCKING** **UST** **U003139340**
ESE **NUT TREE RD** **SWEEPS UST** **N/A**
1/8-1/4 **VACAVILLE, CA 95688**
0.166 mi.
879 ft.

Relative:
Lower

Actual:
113 ft.

SOLANO CO. UST:

Name:	NICK PAPPIN TRUCKING
Address:	NUT TREE RD
City,State,Zip:	VACAVILLE, CA 95688
Facility Id:	80120
Facility Status:	Inactive
Decode for Facility Status:	Closed
Facility Phone:	Not reported
Inventory Number:	1
Inventory Type:	Underground Storage Tank (1)
Inventory Description:	Not reported
Permit Expire/Last Service:	Not reported
Last Service Date:	Not reported
District:	SUP-DIST NO 3031
Inspector:	Dubois, Tristan

SWEEPS UST:

Name:	NICK PAPPIN TRUCKING
Address:	NUT TREE RD
City:	VACAVILLE
Status:	Not reported
Comp Number:	80120
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-080120-000001
Tank Status:	Not reported
Capacity:	1
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	1

C10 **STATE COMPENSATION INSURANCE FUND - WAREHOUSE** **CERS HAZ WASTE** **S121775985**
NE **2051 CESSNA DR** **HWTS** **N/A**
1/8-1/4 **VACAVILLE, CA 95688** **CERS**
0.177 mi.
937 ft. **Site 1 of 2 in cluster C**

Relative:
Higher

Actual:
148 ft.

CERS HAZ WASTE:

Name:	STATE COMPENSATION INSURANCE FUND - WAREHOUSE
Address:	2051 CESSNA DR
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	402855
CERS ID:	10401943
CERS Description:	Hazardous Waste Generator

DRAFT

STATE COMPENSATION INSURANCE FUND - WAREHOUSE (Continued) **S121775985**

HWTS:

Name:	VACAVILLE STATE COMPENSATION INSURANCE FUND
Address:	2051 CESSNA DR
Address 2:	Not reported
City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAL000371114
Inactive Date:	08/12/2020
Create Date:	01/30/2012
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	5890 OWENS DRIVE
Mailing Address 2:	Not reported
Mailing City,State,Zip:	PLEASANTON, CA 945880000
Owner Name:	STATE COMPENSATION INSURANCE FUND
Owner Address:	333 BUSH ST
Owner Address 2:	Not reported
Owner City,State,Zip:	SAN FRANCISCO, CA 941040000
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	RANDY HOGAN
Contact Address:	5890 OWENS DRIVE
Contact Address 2:	Not reported
City,State,Zip:	PLEASANTON, CA 94588
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	38.389915
Longitude:	-121.960996

NAICS:

EPA ID:	CAL000371114
Create Date:	2012-01-30 10:00:23.587
NAICS Code:	323119
NAICS Description:	Other Commercial Printing
Issued EPA ID Date:	2012-01-30 10:00:23.49300
Inactive Date:	2020-08-12 00:00:00
Facility Name:	VACAVILLE STATE COMPENSATION INSURANCE FUND
Facility Address:	2051 CESSNA DR
Facility Address 2:	Not reported
Facility City:	VACAVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	95688

CERS:

Name:	STATE COMPENSATION INSURANCE FUND - WAREHOUSE
Address:	2051 CESSNA DR
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	402855
CERS ID:	10401943
CERS Description:	Chemical Storage Facilities

Evaluation:

Eval General Type:	Compliance Evaluation Inspection

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STATE COMPENSATION INSURANCE FUND - WAREHOUSE (Continued) **S121775985**

Eval Date: 03-24-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-30-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Coordinates:
Site ID: 402855
Facility Name: State Compensation Insurance Fund - Warehouse
Env Int Type Code: HMBP
Program ID: 10401943
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 38.386460
Longitude: -121.961110

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1030 Vaquero Circle
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95688
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: State Fund
Entity Title: Not reported
Affiliation Address: 5880 Owens Drive
Affiliation City: Pleasanton
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95688
Affiliation Phone: (925) 523-5221,

Affiliation Type Desc: Operator
Entity Name: State Compensation Insurance Fund
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported

DRAFT

STATE COMPENSATION INSURANCE FUND - WAREHOUSE (Continued) **S121775985**

Affiliation Phone:	(707) 455-9911,
Affiliation Type Desc:	Property Owner
Entity Name:	State Compensation Insurance Fund
Entity Title:	Not reported
Affiliation Address:	5880 Owens Drive
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95688
Affiliation Phone:	(925) 523-5221,
Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,
Affiliation Type Desc:	Document Preparer
Entity Name:	Joe Fontana
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Joe Fontana
Entity Title:	Not reported
Affiliation Address:	1030 Vaquero Circle
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95688
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	State Compensation Insurance Fund
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Joe Fontana
Entity Title:	Chief Engineer ll
Affiliation Address:	Not reported
Affiliation City:	Not reported

DRAFT

STATE COMPENSATION INSURANCE FUND - WAREHOUSE (Continued) **S121775985**

Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

C11 **STATE COMPENSATION INSURANCE FUND** **RCRA NonGen / NLR** **1024832711**
NE **2051 CESSNA DR** **CAL000371114**
1/8-1/4 **VACAVILLE, CA 95688**
0.177 mi.
937 ft. **Site 2 of 2 in cluster C**

Relative: **Higher**
Actual: **148 ft.**

RCRA Listings:

Date Form Received by Agency:	20120130
Handler Name:	State Compensation Insurance Fund
Handler Address:	2051 CESSNA DR
Handler City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAL000371114
Contact Name:	SARA QUINTERO
Contact Address:	5890 OWENS DRIVE
Contact City,State,Zip:	PLEASANTON, CA 94588
Contact Telephone:	925-523-5338
Contact Fax:	925-523-5366
Contact Email:	SQUINTERO@SCIF.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	5890 OWENS DRIVE
Mailing City,State,Zip:	PLEASANTON, CA 94588-0000
Owner Name:	State Compensation Insurance Fund
Owner Type:	Other
Operator Name:	Sara Quintero
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline

DRAFT

STATE COMPENSATION INSURANCE FUND (Continued) **1024832711**

2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180906
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	STATE COMPENSATION INSURANCE FUND
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	333 BUSH ST
Owner/Operator City,State,Zip:	SAN FRANCISCO, CA 94104-0000
Owner/Operator Telephone:	415-263-5400
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SARA QUINTERO
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	5890 OWENS DRIVE
Owner/Operator City,State,Zip:	PLEASANTON, CA 94588
Owner/Operator Telephone:	925-523-5338
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20120130
Handler Name:	STATE COMPENSATION INSURANCE FUND
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No

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STATE COMPENSATION INSURANCE FUND (Continued) **1024832711**

Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 323119
NAICS Description: OTHER COMMERCIAL PRINTING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

D12 AUTOMATIC BAR CONTROLS, INC **CERS HAZ WASTE** **S121783209**
NE 2060 CESSNA DR STE 100 **CERS** **N/A**
1/8-1/4 VACAVILLE, CA 95688
0.189 mi.
996 ft. **Site 1 of 3 in cluster D**

Relative: Higher
Actual: 140 ft.

CERS HAZ WASTE:
Name: AUTOMATIC BAR CONTROLS, INC
Address: 2060 CESSNA DR STE 100
City,State,Zip: VACAVILLE, CA 95688
Site ID: 428933
CERS ID: 10749679
CERS Description: Hazardous Waste Generator

CERS:
Name: AUTOMATIC BAR CONTROLS, INC
Address: 2060 CESSNA DR STE 100
City,State,Zip: VACAVILLE, CA 95688
Site ID: 428933
CERS ID: 10749679
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 428933
Site Name: Automatic Bar Controls, Inc
Violation Date: 03-02-2023
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 04/03/2023. Update the Site Map and submit to CERS. See CERS submittal 3/31/2023 and accepted 4/3/2023.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 428933
Site Name: Automatic Bar Controls, Inc

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AUTOMATIC BAR CONTROLS, INC (Continued) **S121783209**

Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Update the Hazardous Materials/Waste Inventory to include the following: 1. Add Smart foam A 2. Add Smart foam B 3. Add chlorinated Water 4. Add Refrigerant R-134A 5. Re-assess the Max Daily Amts. for existing HazMat/Waste. 6. Nitrogen, Argon/CO2, and Smart Lube are are all Optional (below thresholds)
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to establish and/or electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material. *Verify agricultural handler exemption HSC 25507.1
Violation Notes:	Update the Training Plan to add Chemical Safety and Haz Comm information and submit to CERS for 2023. Plus train annually. Observed 2022 Safety Training Records but will send copy of Safety Training for 2023 to Max Clark at mgclark@solanocounty.com. Retain physical copies on site for 3 years.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to report program data electronically.
Violation Notes:	Returned to compliance on 07/12/2023. Update the Owner ID page and submit to CERS for 2023. See CERS submittal 3/31/2023 and accepted 4/3/2023. See CERS submittal 7/11/2023 and accepted 7/12/2023.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 04/03/2023. Submit the updated Emergency Response Plan to CERS for 2023. See CERS submittal 3/31/2023 and accepted 4/3/2023.

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AUTOMATIC BAR CONTROLS, INC (Continued) **S121783209**

Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Submittal to CERS is late (last one was 7/2020). Submit to CERS for 2023.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 07/12/2023. Update the Hazardous Materials/Waste Inventory to include the following: 1. Add Smart foam A 2. Add Smart foam B 3. Add chlorinated Water 4. Add Refrigerant R-134A 5. Re-assess the Max Daily Amts. for existing HazMat/Waste. 6. Nitrogen, Argon/CO2, and Smart Lube are are all Optional (below thresholds) See CERS submittal 7/11/2023 and accepted 7/12/2023.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Description:	Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.
Violation Notes:	Send copies of the last 3 years of your Uniform Hazardous Waste Manifests. Keep copies on site for 3 years. Send to Max Clark at mgclark@solanocounty.com. See e-mail 7/25/2023 in Documentum.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter

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AUTOMATIC BAR CONTROLS, INC (Continued) **S121783209**

	6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 07/12/2023. Submittal to CERS is late (last one was 7/2020). Submit to CERS for 2023. See CERS submittal 3/31/2023 and accepted 4/3/2023. See CERS submittal 7/11/2023 and accepted 7/12/2023.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to establish and/or electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material. *Verify agricultural handler exemption HSC 25507.1
Violation Notes:	Returned to compliance on 04/05/2023. Update the Training Plan to add Chemical Safety and Haz Comm information and submit to CERS for 2023. Plus train annually. Observed 2022 Safety Training Records but will send copy of Safety Training for 2023 to Max Clark at mgclark@solanocounty.com. Retain physical copies on site for 3 years. See e-mail dated 4/5/2023 for Training Records requested.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Update the Site Map and submit to CERS.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	03-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to report program data electronically.
Violation Notes:	Update the Owner ID page and submit to CERS for 2023.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	428933
Site Name:	Automatic Bar Controls, Inc
Violation Date:	04-25-2018

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AUTOMATIC BAR CONTROLS, INC (Continued) **S121783209**

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 04/27/2018.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 428933
Site Name: Automatic Bar Controls, Inc
Violation Date: 03-02-2023
Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Description: Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.
Violation Notes: Send copies of the last 3 years of your Uniform Hazardous Waste Manifests. Keep copies on site for 3 years. Send to Max Clark at mgclark@solanocounty.com.
Violation Division: Solano County Environmental Health
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-25-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-02-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Send copies of Manifests for Waste Disposal for the last 3 years to Max Clark at mgclark@solanocounty.com. Retain on site for 3 years. Complete by Apr03.2023. See e-mail in Documentum 7/25/2023. IN COMPLIANCE
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-02-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Updating HMBP in CERS as requested and submitting for 2023. Send copy of 2023 Safety Training to Max Clark at mgclark@solanocounty.com. Complete all by April 3, 2023. Change Name in CERS. Once I accept it, it will change. See CERS submittal 7/11/2023 and a final acceptance

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AUTOMATIC BAR CONTROLS, INC (Continued) **S121783209**

7/12/2023.
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-25-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: Identification Signer
Entity Name: Emmalie Hawes
Entity Title: Director of Human Resources
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: Solano County Env Health
Entity Title: Not reported
Affiliation Address: 675 Texas Street, Suite 5500
Affiliation City: Fairfield
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94533
Affiliation Phone: (707) 784-6765,

Affiliation Type Desc: Document Preparer
Entity Name: Emmalie Hawes
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 2060 Cessna Drive, Suite 100
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95688
Affiliation Phone: ,

Affiliation Type Desc: Operator
Entity Name: Automatic Bar Controls

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AUTOMATIC BAR CONTROLS, INC (Continued) **S121783209**

Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 448-5151,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Emmalie Hawes
Entity Title:	Not reported
Affiliation Address:	2060 Cessna Drive, Suite 100
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95688
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Automatic Bar Controls, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Wayne Froehlich
Entity Title:	Not reported
Affiliation Address:	2060 cessna dr suite 100
Affiliation City:	vacaville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95688
Affiliation Phone:	(630) 461-4518,
Affiliation Type Desc:	Property Owner
Entity Name:	Wayne Froehlich
Entity Title:	Not reported
Affiliation Address:	2060 Cessna Drive, Suite 100
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95688
Affiliation Phone:	(630) 461-4518,

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D13 **AUTOMATIC BAR CONTROLS, INC.** **RCRA-VSQG** **1027703109**
NE **2060 CESSNA DRIVE** **CAR000354860**
1/8-1/4 **VACAVILLE, CA 95688**
0.189 mi.
996 ft. **Site 2 of 3 in cluster D**

Relative:
Higher

Actual:
140 ft.

RCRA Listings:

Date Form Received by Agency:	20230518
Handler Name:	Automatic Bar Controls, Inc.
Handler Address:	CESSNA DRIVE
Handler City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAR000354860
Contact Name:	EMMALIE HAWES
Contact Address:	CESSNA DRIVE
Contact City,State,Zip:	VACAVILLE, CA 95688
Contact Telephone:	707-724-0444
Contact Fax:	Not reported
Contact Email:	EMMALIE.HAWES@WUNDERBAR.COM
Contact Title:	DIRECTOR OF HUMAN RESOURCES WEST COAST
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	CESSNA DRIVE
Mailing City,State,Zip:	VACAVILLE, CA 95688
Owner Name:	Buzz Oates
Owner Type:	Private
Operator Name:	Middleby Corporation
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

DRAFT

AUTOMATIC BAR CONTROLS, INC. (Continued) **1027703109**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20230523
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D002
Waste Description:	Corrosive Waste

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	BUZZ OATES
Legal Status:	Private
Date Became Current:	20170215
Date Ended Current:	Not reported
Owner/Operator Address:	555 CAPITAL MALL
Owner/Operator City,State,Zip:	SACRAMENTO, CA 95814
Owner/Operator Telephone:	916-379-3800
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	DANIASANTOSCRUZ@BUZZOATES.COM

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MIDDLEBY CORPORATION
Legal Status:	Other
Date Became Current:	20130303
Date Ended Current:	Not reported
Owner/Operator Address:	1400 TOASTMASTER DRIVE
Owner/Operator City,State,Zip:	ELGIN, IL 60120
Owner/Operator Telephone:	847-741-3300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	ASHLEY.WILLIAMS@MIDDLEBY.COM

Historic Generators:

Receive Date:	20230518
Handler Name:	AUTOMATIC BAR CONTROLS, INC.
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No

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AUTOMATIC BAR CONTROLS, INC. (Continued) **1027703109**

Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 312111
NAICS Description: SOFT DRINK MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

D14 **AUTOMATIC BAR CONTROLS INC WUNDERBAR** **RCRA NonGen / NLR** **1024860193**
NE **2060 CESSNA DR STE 100** **CAL000428261**
1/8-1/4 **VACAVILLE, CA 95688**
0.189 mi.
996 ft. **Site 3 of 3 in cluster D**

Relative: **Higher**
Actual: **140 ft.**

RCRA Listings:
Date Form Received by Agency: 20170608
Handler Name: Automatic Bar Controls Inc Wunderbar
Handler Address: 2060 CESSNA DR STE 100
Handler City,State,Zip: VACAVILLE, CA 95688
EPA ID: CAL000428261
Contact Name: ROBERT LORENZ
Contact Address: 2060 CESSNA DR SUITE 100
Contact City,State,Zip: VACAVILLE, CA 95688
Contact Telephone: 707-448-5151
Contact Fax: 707-448-1521
Contact Email: ROBERT.LORENZ@WUNDERBAR.COM
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported
Mailing Address: 2060 CESSNA DR SUITE 100
Mailing City,State,Zip: VACAVILLE, CA 95688-0000
Owner Name: Automatic Bar Controls Inc
Owner Type: Other
Operator Name: Robert Lorenz
Operator Type: Other
Short-Term Generator Activity: No
Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility Activity: No
Recycler Activity with Storage: No
Small Quantity On-Site Burner Exemption: No

DRAFT

AUTOMATIC BAR CONTROLS INC WUNDERBAR (Continued) **1024860193**

Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180907
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ROBERT LORENZ
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2060 CESSNA DR SUITE 100
Owner/Operator City,State,Zip:	VACAVILLE, CA 95688
Owner/Operator Telephone:	707-448-5151
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	AUTOMATIC BAR CONTROLS INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2060 CESSNA DR SUITE 100
Owner/Operator City,State,Zip:	VACAVILLE, CA 95688-0000
Owner/Operator Telephone:	707-448-5151
Owner/Operator Telephone Ext:	Not reported

DRAFT

AUTOMATIC BAR CONTROLS INC WUNDERBAR (Continued) **1024860193**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20170608
Handler Name: AUTOMATIC BAR CONTROLS INC WUNDERBAR
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E15 **COURT GALVANIZING, INC.** **CERS HAZ WASTE** **S121772412**
NNE **4937 ALLISON PKWY** **CERS** **N/A**
1/8-1/4 **VACAVILLE, CA 95688**
0.196 mi.
1036 ft. **Site 1 of 6 in cluster E**

Relative:
Higher

Actual:
133 ft.

CERS HAZ WASTE:
Name: COURT GALVANIZING, INC.
Address: 4937 ALLISON PKWY
City,State,Zip: VACAVILLE, CA 95688
Site ID: 390723
CERS ID: 10117198
CERS Description: Hazardous Waste Generator

Name: COURT GALVANIZING, INC.
Address: 4937 ALLISON PKWY
City,State,Zip: VACAVILLE, CA 95688
Site ID: 390723
CERS ID: 10117198
CERS Description: Hazardous Waste Onsite Treatment

CERS:
Name: COURT GALVANIZING, INC.
Address: 4937 ALLISON PKWY
City,State,Zip: VACAVILLE, CA 95688
Site ID: 390723
CERS ID: 215943

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COURT GALVANIZING, INC. (Continued) **S121772412**

CERS Description: Industrial Facility Storm Water

Violations:

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-29-2014
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description: Failure to properly close hazardous waste containers when not in active use.
Violation Notes: Returned to compliance on 07/27/2017. Ensure containers kept closed when not in active use.
Violation Division: Solano County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 03-30-2006
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient Report
Violation Notes: NOV for submitting an incomplete annual report for 2005/2006
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-29-2014
Citation: 40 CFR 1 265.174 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.174
Violation Description: Failure to inspect hazardous waste storage areas at least weekly.
Violation Notes: Returned to compliance on 07/29/2014. Recommend adding specific drums to weekly check sheet.
Violation Division: Solano County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-29-2014
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 07/29/2014. Properly label Excluded Recyclable Materials labels on containers below cyclone
Violation Division: Solano County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-29-2014
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)

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COURT GALVANIZING, INC. (Continued) **S121772412**

Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 09/09/2014. CERS submittals Accepted, except Recycled Materials Report needs updates and re-submission.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-02-1999
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient Report
Violation Notes: Non-submittal of Annual Report. Due 7//1/1999
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-29-2014
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 07/29/2014. Seal/close plug valve on boiler. Issue was Corrected on Site
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-01-2007
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient BMP Implementation
Violation Notes: Failure to maintain stormwater BMPs. Exceedance of EPA benchmarks.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-29-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: 4 "sludge drying containers" observed. No violations noted, process and volumes fall within submitted tier level.
Eval Division: Solano County Environmental Health
Eval Program: PBR
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION WITH JOSH STEEL AND COURTNEY OSIER

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COURT GALVANIZING, INC. (Continued) **S121772412**

Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION WITH JOSH STEELE AND COURTNEY OSIER
Eval Division: Solano County Environmental Health
Eval Program: PBR
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-14-2012
Violations Found: No
Eval Type: Industrial Storm Water Compliance Evaluation
Eval Notes: On 14 March 2012, Central Valley Regional Water Quality Control Board staff inspected the Court Galvanizing facility located at 4937 Allison Pkwy in Vacaville. During the site inspection staff determined that the SWPPP was last updated in 2007 and was generally complete. The inspection reports were up to date. The facility provides custom hot dip galvanizing for multiple clients. The facility had an asphalt or concrete surface. The surface of the facility was clean. The facility sweeps on a weekly basis. The facility captures storm water in two large onsite tanks for reuse in the galvanizing process. Prior to being pumped into the tanks the storm water is filtered in an onsite filtration system. The facility also has an onsite detention basin which captures excess storm water runoff that cannot be contained in the tanks. The detention basin is equipped with a sprinkler system. The facility had a covered and bermed chemical storage area, multiple covered work areas, covered metal recycling and storage area and covered metal processing area. Staff observed some metal both finished and unfinished stored on stickers on the concrete surface behind the facility. The vast majority of the material was stored off of the concrete surface, but was exposed to storm water.
Eval Division: Water Boards
Eval Program: INDSTW
Eval Source: SMARTS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: PBR
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 09-09-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

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COURT GALVANIZING, INC. (Continued) **S121772412**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-29-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-29-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Recycled Materials Report needs revisions and re-submission to CERS
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION WITH JOSH STEELE AND COURTNEY OSIER
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 390723
Site Name: Court Galvanizing, Inc.
Site Address: 4937 ALLISON PKWY
Site City: VACAVILLE
Site Zip: 95688
Enf Action Date: 05-01-2008
Enf Action Type: Staff Enforcement Letter
Enf Action Description: Staff Enforcement Letter
Enf Action Notes: SEL for exceedance of benchmark values in storm water discharges, indicating a need to improve BMPs.
Enf Action Division: Water Boards

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COURT GALVANIZING, INC. (Continued) **S121772412**

Enf Action Program: INDSTW
Enf Action Source: SMARTS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Site Address: 4937 ALLISON PKWY
Site City: VACAVILLE
Site Zip: 95688
Enf Action Date: 03-30-2007
Enf Action Type: Notice of Violation
Enf Action Description: Notice of Violation
Enf Action Notes: NOV for submitting incomplete annual report for 2005/2006.
Enf Action Division: Water Boards
Enf Action Program: INDSTW
Enf Action Source: SMARTS,

Coordinates:
Site ID: 390723
Facility Name: Court Galvanizing, Inc.
Env Int Type Code: SMSWIND
Program ID: 215943
Coord Name: Not reported
Ref Point Type Desc: Unknown,
Latitude: 38.389230
Longitude: -121.965815

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Solano County Env Health
Entity Title: Not reported
Affiliation Address: 675 Texas Street, Suite 5500
Affiliation City: Fairfield
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94533
Affiliation Phone: (707) 784-6765,

Affiliation Type Desc: Operator
Entity Name: Bill Armstrong
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (707) 448-4848,

Affiliation Type Desc: Owner/Operator
Entity Name: Court Galvanizing
Entity Title: Operator
Affiliation Address: 4937 Allison Pkwy
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95688
Affiliation Phone: ,

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COURT GALVANIZING, INC. (Continued) **S121772412**

Affiliation Type Desc:	Property Owner
Entity Name:	Court Galvanizing, Inc.
Entity Title:	Not reported
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95688
Affiliation Phone:	(707) 448-4848,

Affiliation Type Desc:	Parent Corporation
Entity Name:	Court Galvanizing, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Document Preparer
Entity Name:	Lafayette Foland, Chemical Data Mgmt Sys
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95688
Affiliation Phone:	,

Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	Jan Reid
Entity Title:	Plant Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Jan Reid
Entity Title:	Not reported
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported

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COURT GALVANIZING, INC. (Continued) **S121772412**

Affiliation Zip: 95688
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: Bill Armstrong
Entity Title: General Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: William Court
Entity Title: Not reported
Affiliation Address: 4937 Allison Pkwy
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95688
Affiliation Phone: (707) 448-4848,

Name: COURT GALVANIZING, INC.
Address: 4937 ALLISON PKWY
City,State,Zip: VACAVILLE, CA 95688
Site ID: 390723
CERS ID: 10117198
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-29-2014
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description: Failure to properly close hazardous waste containers when not in active use.
Violation Notes: Returned to compliance on 07/27/2017. Ensure containers kept closed when not in active use.
Violation Division: Solano County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 03-30-2006
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient Report
Violation Notes: NOV for submitting an incomplete annual report for 2005/2006
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-29-2014

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COURT GALVANIZING, INC. (Continued) **S121772412**

Citation:	40 CFR 1 265.174 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.174
Violation Description:	Failure to inspect hazardous waste storage areas at least weekly.
Violation Notes:	Returned to compliance on 07/29/2014. Recommend adding specific drums to weekly check sheet.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Violation Date:	07-29-2014
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 07/29/2014. Properly label Excluded Recyclable Materials labels on containers below cyclone
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Violation Date:	07-29-2014
Citation:	HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description:	Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 09/09/2014. CERS submittals Accepted, except Recycled Materials Report needs updates and re-submission.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Violation Date:	07-02-1999
Citation:	2014-0057-DWQ - Industrial General Permit
Violation Description:	SW - Deficient Report
Violation Notes:	Non-submittal of Annual Report. Due 7//1/1999
Violation Division:	Water Boards
Violation Program:	INDSTW
Violation Source:	SMARTS,
Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Violation Date:	07-29-2014
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 07/29/2014. Seal/close plug valve on boiler. Issue was Corrected on Site
Violation Division:	Solano County Environmental Health

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COURT GALVANIZING, INC. (Continued) **S121772412**

Violation Program: HMRRP
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-01-2007
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient BMP Implementation
Violation Notes: Failure to maintain stormwater BMPs. Exceedance of EPA benchmarks.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-29-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: 4 "sludge drying containers" observed. No violations noted, process and volumes fall within submitted tier level.
Eval Division: Solano County Environmental Health
Eval Program: PBR
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION WITH JOSH STEEL AND COURTNEY OSIER
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION WITH JOSH STEELE AND COURTNEY OSIER
Eval Division: Solano County Environmental Health
Eval Program: PBR
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-14-2012
Violations Found: No
Eval Type: Industrial Storm Water Compliance Evaluation
Eval Notes: On 14 March 2012, Central Valley Regional Water Quality Control Board staff inspected the Court Galvanizing facility located at 4937 Allison Pkwy in Vacaville. During the site inspection staff determined that the SWPPP was last updated in 2007 and was generally complete. The inspection reports were up to date. The facility provides custom hot dip galvanizing for multiple clients. The facility had an asphalt or concrete surface. The surface of the facility was clean. The facility sweeps on a weekly basis. The facility captures storm water in two large onsite tanks for reuse in the galvanizing process. Prior to being pumped into the tanks the storm water is filtered in an onsite filtration system. The facility also has an onsite detention basin

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COURT GALVANIZING, INC. (Continued) **S121772412**

which captures excess storm water runoff that cannot be contained in the tanks. The detention basin is equipped with a sprinkler system. The facility had a covered and bermed chemical storage area, multiple covered work areas, covered metal recycling and storage area and covered metal processing area. Staff observed some metal both finished and unfinished stored on stickers on the concrete surface behind the facility. The vast majority of the material was stored off of the concrete surface, but was exposed to storm water.

Eval Division: Water Boards
Eval Program: INDSTW
Eval Source: SMARTS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: PBR
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 09-09-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-29-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

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COURT GALVANIZING, INC. (Continued) **S121772412**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-29-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Recycled Materials Report needs revisions and re-submission to CERS
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION WITH JOSH STEELE AND COURTNEY OSIER
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 390723
Site Name: Court Galvanizing, Inc.
Site Address: 4937 ALLISON PKWY
Site City: VACAVILLE
Site Zip: 95688
Enf Action Date: 05-01-2008
Enf Action Type: Staff Enforcement Letter
Enf Action Description: Staff Enforcement Letter
Enf Action Notes: SEL for exceedance of benchmark values in storm water discharges, indicating a need to improve BMPs.
Enf Action Division: Water Boards
Enf Action Program: INDSTW
Enf Action Source: SMARTS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Site Address: 4937 ALLISON PKWY
Site City: VACAVILLE
Site Zip: 95688
Enf Action Date: 03-30-2007
Enf Action Type: Notice of Violation
Enf Action Description: Notice of Violation
Enf Action Notes: NOV for submitting incomplete annual report for 2005/2006.
Enf Action Division: Water Boards
Enf Action Program: INDSTW
Enf Action Source: SMARTS,

Coordinates:
Site ID: 390723
Facility Name: Court Galvanizing, Inc.
Env Int Type Code: SMSWIND
Program ID: 215943
Coord Name: Not reported
Ref Point Type Desc: Unknown,
Latitude: 38.389230
Longitude: -121.965815

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COURT GALVANIZING, INC. (Continued) **S121772412**

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,

Affiliation Type Desc:	Operator
Entity Name:	Bill Armstrong
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 448-4848,

Affiliation Type Desc:	Owner/Operator
Entity Name:	Court Galvanizing
Entity Title:	Operator
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95688
Affiliation Phone:	,

Affiliation Type Desc:	Property Owner
Entity Name:	Court Galvanizing, Inc.
Entity Title:	Not reported
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95688
Affiliation Phone:	(707) 448-4848,

Affiliation Type Desc:	Parent Corporation
Entity Name:	Court Galvanizing, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Document Preparer
Entity Name:	Lafayette Foland, Chemical Data Mgmt Sys
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported

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COURT GALVANIZING, INC. (Continued) **S121772412**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95688
Affiliation Phone:	,
Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	Jan Reid
Entity Title:	Plant Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Jan Reid
Entity Title:	Not reported
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95688
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Bill Armstrong
Entity Title:	General Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	William Court
Entity Title:	Not reported
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95688
Affiliation Phone:	(707) 448-4848,

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E16 **COURT GALVANIZING INC.** **CERS TANKS** **S113071861**
NNE **4937 ALLISON PKWY** **HWTS** **N/A**
1/8-1/4 **VACAVILLE, CA 95688** **HAZNET**
0.196 mi.
1036 ft. **Site 2 of 6 in cluster E**

Relative:
Higher

Actual:
133 ft.

CERS TANKS:

Name:	COURT GALVANIZING, INC.
Address:	4937 ALLISON PKWY
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	390723
CERS ID:	10117198
CERS Description:	Aboveground Petroleum Storage

Violations:

Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Violation Date:	07-29-2014
Citation:	40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description:	Failure to properly close hazardous waste containers when not in active use.
Violation Notes:	Returned to compliance on 07/27/2017. Ensure containers kept closed when not in active use.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,

Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Violation Date:	03-30-2006
Citation:	2014-0057-DWQ - Industrial General Permit
Violation Description:	SW - Deficient Report
Violation Notes:	NOV for submitting an incomplete annual report for 2005/2006
Violation Division:	Water Boards
Violation Program:	INDSTW
Violation Source:	SMARTS,

Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Violation Date:	07-29-2014
Citation:	40 CFR 1 265.174 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.174
Violation Description:	Failure to inspect hazardous waste storage areas at least weekly.
Violation Notes:	Returned to compliance on 07/29/2014. Recommend adding specific drums to weekly check sheet.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,

Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Violation Date:	07-29-2014
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 07/29/2014. Properly label Excluded

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COURT GALVANIZING INC. (Continued) **S113071861**

Recyclable Materials labels on containers below cyclone
Violation Division: Solano County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-29-2014
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 09/09/2014. CERS submittals Accepted, except Recycled Materials Report needs updates and re-submission.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-02-1999
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient Report
Violation Notes: Non-submittal of Annual Report. Due 7//1/1999
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-29-2014
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 07/29/2014. Seal/close plug valve on boiler. Issue was Corrected on Site
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 390723
Site Name: Court Galvanizing, Inc.
Violation Date: 07-01-2007
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient BMP Implementation
Violation Notes: Failure to maintain stormwater BMPs. Exceedance of EPA benchmarks.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-29-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: 4 "sludge drying containers" observed. No violations noted, process

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COURT GALVANIZING INC. (Continued) **S113071861**

and volumes fall within submitted tier level.
Eval Division: Solano County Environmental Health
Eval Program: PBR
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION WITH JOSH STEEL AND COURTNEY OSIER
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION WITH JOSH STEELE AND COURTNEY OSIER
Eval Division: Solano County Environmental Health
Eval Program: PBR
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-14-2012
Violations Found: No
Eval Type: Industrial Storm Water Compliance Evaluation
Eval Notes: On 14 March 2012, Central Valley Regional Water Quality Control Board staff inspected the Court Galvanizing facility located at 4937 Allison Pkwy in Vacaville. During the site inspection staff determined that the SWPPP was last updated in 2007 and was generally complete. The inspection reports were up to date. The facility provides custom hot dip galvanizing for multiple clients. The facility had an asphalt or concrete surface. The surface of the facility was clean. The facility sweeps on a weekly basis. The facility captures storm water in two large onsite tanks for reuse in the galvanizing process. Prior to being pumped into the tanks the storm water is filtered in an onsite filtration system. The facility also has an onsite detention basin which captures excess storm water runoff that cannot be contained in the tanks. The detention basin is equipped with a sprinkler system. The facility had a covered and bermed chemical storage area, multiple covered work areas, covered metal recycling and storage area and covered metal processing area. Staff observed some metal both finished and unfinished stored on stickers on the concrete surface behind the facility. The vast majority of the material was stored off of the concrete surface, but was exposed to storm water.
Eval Division: Water Boards
Eval Program: INDSTW
Eval Source: SMARTS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: PBR

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COURT GALVANIZING INC. (Continued) **S113071861**

Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 09-09-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-29-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-29-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Recycled Materials Report needs revisions and re-submission to CERS
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-04-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION WITH JOSH STEELE AND COURTNEY OSIER
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

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COURT GALVANIZING INC. (Continued) **S113071861**

Enforcement Action:

Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Site Address:	4937 ALLISON PKWY
Site City:	VACAVILLE
Site Zip:	95688
Enf Action Date:	05-01-2008
Enf Action Type:	Staff Enforcement Letter
Enf Action Description:	Staff Enforcement Letter
Enf Action Notes:	SEL for exceedance of benchmark values in storm water discharges, indicating a need to improve BMPs.
Enf Action Division:	Water Boards
Enf Action Program:	INDSTW
Enf Action Source:	SMARTS,

Site ID:	390723
Site Name:	Court Galvanizing, Inc.
Site Address:	4937 ALLISON PKWY
Site City:	VACAVILLE
Site Zip:	95688
Enf Action Date:	03-30-2007
Enf Action Type:	Notice of Violation
Enf Action Description:	Notice of Violation
Enf Action Notes:	NOV for submitting incomplete annual report for 2005/2006.
Enf Action Division:	Water Boards
Enf Action Program:	INDSTW
Enf Action Source:	SMARTS,

Coordinates:

Site ID:	390723
Facility Name:	Court Galvanizing, Inc.
Env Int Type Code:	SMSWIND
Program ID:	215943
Coord Name:	Not reported
Ref Point Type Desc:	Unknown,
Latitude:	38.389230
Longitude:	-121.965815

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,

Affiliation Type Desc:	Operator
Entity Name:	Bill Armstrong
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported

DRAFT

COURT GALVANIZING INC. (Continued) **S113071861**

Affiliation Zip:	Not reported
Affiliation Phone:	(707) 448-4848,
Affiliation Type Desc:	Owner/Operator
Entity Name:	Court Galvanizing
Entity Title:	Operator
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95688
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	Court Galvanizing, Inc.
Entity Title:	Not reported
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95688
Affiliation Phone:	(707) 448-4848,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Court Galvanizing, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Document Preparer
Entity Name:	Lafayette Foland, Chemical Data Mgmt Sys
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	4937 Allison Pkwy
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95688
Affiliation Phone:	,
Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	Jan Reid
Entity Title:	Plant Manager
Affiliation Address:	Not reported

DRAFT

COURT GALVANIZING INC. (Continued) **S113071861**

Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Jan Reid
Entity Title: Not reported
Affiliation Address: 4937 Allison Pkwy
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95688
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: Bill Armstrong
Entity Title: General Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: William Court
Entity Title: Not reported
Affiliation Address: 4937 Allison Pkwy
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95688
Affiliation Phone: (707) 448-4848,

HWTS:
Name: COURT GALVANIZING, INC.
Address: 4937 ALLISON PKWY
Address 2: Not reported
City,State,Zip: VACAVILLE, CA 95688
EPA ID: CAL000126952
Inactive Date: Not reported
Create Date: 01/04/1994
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 4937 ALLISON PKWY
Mailing Address 2: Not reported
Mailing City,State,Zip: VACAVILLE, CA 956889346
Owner Name: WILLIAM COURT
Owner Address: 4937 ALLISON PKWY
Owner Address 2: Not reported
Owner City,State,Zip: VACAVILLE, CA 956889346
Owner Phone: Not reported
Owner Fax: Not reported
Contact Name: JAN REID

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COURT GALVANIZING INC. (Continued) **S113071861**

Contact Address:	4937 ALLISON PKWY
Contact Address 2:	Not reported
City,State,Zip:	VACAVILLE, CA 956889346
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Active
Facility Type:	PERMANENT
Category:	STATE
Latitude:	38.389916
Longitude:	-121.966544

NAICS:

EPA ID:	CAL000126952
Create Date:	2002-03-14 16:36:28.000
NAICS Code:	3328
NAICS Description:	Coating, Engraving, Heat Treating, and Allied Activities
Issued EPA ID Date:	1994-01-04 00:00:00
Inactive Date:	Not reported
Facility Name:	COURT GALVANIZING, INC.
Facility Address:	4937 ALLISON PKWY
Facility Address 2:	Not reported
Facility City:	VACAVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	956889346

EPA ID:	CAL000126952
Create Date:	2014-12-16 05:37:50.997
NAICS Code:	332812
NAICS Description:	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers
Issued EPA ID Date:	1994-01-04 00:00:00
Inactive Date:	Not reported
Facility Name:	COURT GALVANIZING, INC.
Facility Address:	4937 ALLISON PKWY
Facility Address 2:	Not reported
Facility City:	VACAVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	956889346

EPA ID:	CAL000126952
Create Date:	2014-12-16 05:37:50.997
NAICS Code:	332812
NAICS Description:	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers
Issued EPA ID Date:	1994-01-04 00:00:00
Inactive Date:	Not reported
Facility Name:	COURT GALVANIZING, INC.
Facility Address:	4937 ALLISON PKWY
Facility Address 2:	Not reported
Facility City:	VACAVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	956889346

EPA ID:	CAL000126952
Create Date:	2014-12-16 05:37:50.997

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COURT GALVANIZING INC. (Continued) **S113071861**

NAICS Code:	339911
NAICS Description:	Jewelry (except Costume) Manufacturing
Issued EPA ID Date:	1994-01-04 00:00:00
Inactive Date:	Not reported
Facility Name:	COURT GALVANIZING, INC.
Facility Address:	4937 ALLISON PKWY
Facility Address 2:	Not reported
Facility City:	VACAVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	956889346

EPA ID:	CAL000126952
Create Date:	2003-10-23 15:27:19.000
NAICS Code:	339912
NAICS Description:	Silverware and Hollowware Manufacturing
Issued EPA ID Date:	1994-01-04 00:00:00
Inactive Date:	Not reported
Facility Name:	COURT GALVANIZING, INC.
Facility Address:	4937 ALLISON PKWY
Facility Address 2:	Not reported
Facility City:	VACAVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	956889346

EPA ID:	CAL000126952
Create Date:	2014-12-16 05:37:50.997
NAICS Code:	339914
NAICS Description:	Costume Jewelry and Novelty Manufacturing
Issued EPA ID Date:	1994-01-04 00:00:00
Inactive Date:	Not reported
Facility Name:	COURT GALVANIZING, INC.
Facility Address:	4937 ALLISON PKWY
Facility Address 2:	Not reported
Facility City:	VACAVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	956889346

HAZNET:

Name:	COURT GALVANIZING INC.
Address:	4937 ALLISON PKWY
Address 2:	Not reported
City,State,Zip:	VACAVILLE, CA 956889346
Contact:	JAN REID
Telephone:	7074484848
Mailing Name:	Not reported
Mailing Address:	4937 ALLISON PKWY

Year:	2021
Gepaid:	CAL000126952
TSD EPA ID:	NVT330010000
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)

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COURT GALVANIZING INC. (Continued) **S113071861**

Tons:	1.574
Year:	2020
Gepaid:	CAL000126952
TSD EPA ID:	NVT330010000
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	1.865
Year:	2018
Gepaid:	CAL000126952
TSD EPA ID:	NVT330010000
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	1.96200
Year:	2017
Gepaid:	CAL000126952
TSD EPA ID:	NVT330010000
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	3.962
Year:	2016
Gepaid:	CAL000126952
TSD EPA ID:	NVT330010000
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	7.938
Year:	2015
Gepaid:	CAL000126952
TSD EPA ID:	NVD980665560
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	1.165
Year:	2014
Gepaid:	CAL000126952
TSD EPA ID:	NVT330010000
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	2.461
Year:	2013
Gepaid:	CAL000126952
TSD EPA ID:	NVT330010000
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	4.954

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COURT GALVANIZING INC. (Continued) **S113071861**

Year:	2012
Gepaid:	CAL000126952
TSD EPA ID:	NVT330010000
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	7.587

Year:	2012
Gepaid:	CAL000126952
TSD EPA ID:	NVT330010000
CA Waste Code:	161 - Fluid Catalytic Cracker waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	1.796

Click this hyperlink while viewing on your computer to access
33 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:

Year:	2021
Gen EPA ID:	CAL000126952
Shipment Date:	1/29/2020
Creation Date:	11/20/2020
Receipt Date:	2/5/2020
Manifest ID:	019353643JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA, INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	1.865
Waste Quantity:	3730
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2020
Gen EPA ID:	CAL000126952
Shipment Date:	1/29/2020
Creation Date:	11/20/2020
Receipt Date:	2/5/2020

DRAFT

COURT GALVANIZING INC. (Continued) **S113071861**

Manifest ID:	019353643JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA, INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	1.865
Waste Quantity:	3730
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2017
Gen EPA ID:	CAL000126952
Shipment Date:	20170413
Creation Date:	5/12/2018 18:32:44
Receipt Date:	20170502
Manifest ID:	015011717JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	3.962
Waste Quantity:	7924
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2016
Gen EPA ID:	CAL000126952
Shipment Date:	20151214

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COURT GALVANIZING INC. (Continued) **S113071861**

Creation Date:	9/27/2016 18:30:52
Receipt Date:	20151229
Manifest ID:	015011575JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	3.529
Waste Quantity:	7058
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150216
Creation Date:	8/5/2015 22:15:33
Receipt Date:	20150311
Manifest ID:	008958297JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT LLC
TSDF EPA ID:	NVD980665560
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	1.165
Waste Quantity:	2330
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000126952

Shipment Date:	20151214
Creation Date:	9/27/2016 18:30:52
Receipt Date:	20151229
Manifest ID:	015011575JJK

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COURT GALVANIZING INC. (Continued) **S113071861**

Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	3.529
Waste Quantity:	7058
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150216
Creation Date:	8/5/2015 22:15:33
Receipt Date:	20150311
Manifest ID:	008958297JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT LLC
TSDF EPA ID:	NVD980665560
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	1.165
Waste Quantity:	2330
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2014
Gen EPA ID:	CAL000126952
Shipment Date:	20140212
Creation Date:	7/24/2014 22:15:15
Receipt Date:	20140307
Manifest ID:	008958232JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	CAR000179382

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COURT GALVANIZING INC. (Continued) **S113071861**

Trans 2 Name:	ENV ENVIRONMENTAL INTERNATIONAL INC
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	2.461
Waste Quantity:	4922
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2013
Gen EPA ID:	CAL000126952
Shipment Date:	20131024
Creation Date:	4/7/2014 22:15:17
Receipt Date:	20131115
Manifest ID:	008958207JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	CAR000179382
Trans 2 Name:	ENV INTERNATIONAL
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	4.954
Waste Quantity:	9908
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2012
Gen EPA ID:	CAL000126952
Shipment Date:	20121211
Creation Date:	6/5/2013 22:15:06
Receipt Date:	20130107
Manifest ID:	008958148JJK
Trans EPA ID:	CAR000153304

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COURT GALVANIZING INC. (Continued) **S113071861**

Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	CAR000179382
Trans 2 Name:	ENV ENVIRONMENTAL
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	161 - Fluid-cracking catalyst (FCC) waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	1.796
Waste Quantity:	3592
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20120620
Creation Date:	1/19/2013 22:15:23
Receipt Date:	20120706
Manifest ID:	008958097JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	CAR000179382
Trans 2 Name:	ENV ENVIRONMENTAL INTERNATIONAL INC
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	4.318
Waste Quantity:	8636
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20120123
Creation Date:	7/5/2012 20:30:09
Receipt Date:	20120210
Manifest ID:	008958061JJK
Trans EPA ID:	CAR000153304
Trans Name:	KR ENVIRONMENTAL
Trans 2 EPA ID:	CAR000179382
Trans 2 Name:	ENV ENVIRONMENTAL INTERNATIONAL
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported

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COURT GALVANIZING INC. (Continued) **S113071861**

Waste Code Description: 181 - Other inorganic solid waste Organics
RCRA Code: Not reported
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons: 3.269
Waste Quantity: 6538
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 2011
Gen EPA ID: CAL000126952

Shipment Date: 20110421
Creation Date: 6/4/2011 18:30:48
Receipt Date: 20110503
Manifest ID: 001572479JJK
Trans EPA ID: CAR000153304
Trans Name: KR ENVIRONMENTAL
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAT000646117
Trans Name: CWM
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 181 - Other inorganic solid waste Organics
RCRA Code: Not reported
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons: 4.618
Waste Quantity: 9236
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

E17 **COURT GALVANIZING, INC.** **RCRA-LQG** **1007200286**
NNE **4937 ALLISON PARKWAY** **ENVIROSTOR** **CAL000126952**
1/8-1/4 **VACAVILLE, CA 95688** **NPDES**
0.196 mi. **CIWQS**
1036 ft. **Site 3 of 6 in cluster E**

Relative: **Higher**
Actual: **133 ft.**

RCRA Listings:
Date Form Received by Agency: 20060226
Handler Name: Court Galvanizing, Inc.
Handler Address: 4937 ALLISON PARKWAY
Handler City,State,Zip: VACAVILLE, CA 95688
EPA ID: CAL000126952
Contact Name: JAN REID
Contact Address: Not reported
Contact City,State,Zip: Not reported

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COURT GALVANIZING, INC. (Continued) **1007200286**

Contact Telephone:	707-448-4848 x104
Contact Fax:	Not reported
Contact Email:	NA
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	2005
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	4937 ALLISON PARKWAY
Mailing City,State,Zip:	VACAVILLE, CA 95688
Owner Name:	Court Galvanizing, Inc.
Owner Type:	Private
Operator Name:	Court Galvanizing, Inc.
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20061115
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No

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COURT GALVANIZING, INC. (Continued) **1007200286**

Manifest Broker: No
Sub-Part P Indicator: No

Biennial: List of Years
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D007
Waste Description: Chromium

Waste Code: D008
Waste Description: Lead

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: COURT GALVANIZING, INC.
Legal Status: Private
Date Became Current: 19940126
Date Ended Current: Not reported
Owner/Operator Address: 4937 ALLISON PARKWAY
Owner/Operator City,State,Zip: VACAVILLE, CA 95688
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: COURT GALVANIZING, INC.
Legal Status: Private
Date Became Current: 19940126
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: COURT GALVANIZING, INC.
Legal Status: Private
Date Became Current: 19940126
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported

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COURT GALVANIZING, INC. (Continued) **1007200286**

Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: COURT GALVANIZING, INC.
Legal Status: Private
Date Became Current: 19940126
Date Ended Current: Not reported
Owner/Operator Address: 4937 ALLISON PARKWAY
Owner/Operator City,State,Zip: VACAVILLE, CA 95688
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20020226
Handler Name: COURT GALVANIZING INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20040226
Handler Name: COURT GALVANIZING, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20060226
Handler Name: COURT GALVANIZING, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 332812

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COURT GALVANIZING, INC. (Continued) **1007200286**

NAICS Description: METAL COATING, ENGRAVING (EXCEPT JEWELRY AND SILVERWARE), AND ALLIED SERVICES TO MANUFACTURERS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

ENVIROSTOR:

Name:	COURT GALVANIZING, INC.
Address:	4937 ALLISON PARKWAY
City,State,Zip:	VACAVILLE, CA 95688
Facility ID:	71003336
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Sacramento
Assembly:	11
Senate:	03
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	38.38924
Longitude:	-121.9658
APN:	0133220130, 0133220140, 0133220150, 0133220160, 0133330190
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	0133220130
Alias Type:	APN
Alias Name:	0133220140
Alias Type:	APN
Alias Name:	0133220150
Alias Type:	APN
Alias Name:	0133220160
Alias Type:	APN
Alias Name:	0133330190
Alias Type:	APN
Alias Name:	CAL000126952
Alias Type:	EPA Identification Number
Alias Name:	71003336
Alias Type:	Envirostor ID Number

Completed Info:

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COURT GALVANIZING, INC. (Continued) **1007200286**

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

NPDES:

Name:	COURT GALVANIZING INC
Address:	4937 ALLISON PKWY
City,State,Zip:	VACAVILLE, CA 95688
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	5S48I012249
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	04/10/1996
Operator Name:	Court Galvanizing
Operator Address:	4937 Allison Pkwy
Operator City:	Vacaville
Operator State:	California
Operator Zip:	95688

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	202038
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S48I012249

DRAFT

COURT GALVANIZING, INC. (Continued) **1007200286**

Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/10/1996
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Court Galvanizing
Discharge Address:	4937 Allison Pkwy
Discharge City:	Vacaville
Discharge State:	California
Discharge Zip:	95688
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported

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COURT GALVANIZING, INC. (Continued) **1007200286**

Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	202038
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S48I012249
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	04/10/1996
Status:	Active
Status Date:	04/10/1996
Place Size:	2.14
Place Size Unit:	Acres
Contact:	Jan Reid
Contact Title:	Not reported
Contact Phone:	707-448-4848
Contact Phone Ext:	Not reported
Contact Email:	janreid@courtgalvanizinginc.com
Operator Name:	Court Galvanizing
Operator Address:	4937 Allison Pkwy
Operator City:	Vacaville
Operator State:	California
Operator Zip:	95688
Operator Contact:	Bill Armstrong
Operator Contact Title:	General Manager
Operator Contact Phone:	707-448-4848
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	billarmstrong@courtgalvanizinginc.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported

DRAFT

COURT GALVANIZING, INC. (Continued) **1007200286**

Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	707-448-4848
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Horse Creekulatis Creek
Certifier:	William Armstrong
Certifier Title:	General Manager
Certification Date:	23-JUN-15
Primary Sic:	3479-Coating, Engraving, and Allied Services, NEC
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	COURT GALVANIZING INC
Address:	4937 ALLISON PKWY
City,State,Zip:	VACAVILLE, CA 95688
Facility Status:	Active
NPDES Number:	CAS000001
Region:	5S
Agency Number:	0
Regulatory Measure ID:	202038
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	5S48I012249
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/10/1996
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	4937 Allison Pkwy
Discharge Name:	Court Galvanizing
Discharge City:	Vacaville
Discharge State:	California
Discharge Zip:	95688
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported

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COURT GALVANIZING, INC. (Continued) **1007200286**

Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	202038
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S48I012249
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/10/1996
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Court Galvanizing
Discharge Address:	4937 Allison Pkwy
Discharge City:	Vacaville
Discharge State:	California
Discharge Zip:	95688
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported

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COURT GALVANIZING, INC. (Continued) **1007200286**

Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	202038
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S48I012249
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	04/10/1996
Status:	Active
Status Date:	04/10/1996
Place Size:	2.14
Place Size Unit:	Acres
Contact:	Jan Reid
Contact Title:	Not reported
Contact Phone:	707-448-4848
Contact Phone Ext:	Not reported
Contact Email:	janreid@courtgalvanizinginc.com
Operator Name:	Court Galvanizing
Operator Address:	4937 Allison Pkwy
Operator City:	Vacaville
Operator State:	California
Operator Zip:	95688

DRAFT

COURT GALVANIZING, INC. (Continued) **1007200286**

Operator Contact:	Bill Armstrong
Operator Contact Title:	General Manager
Operator Contact Phone:	707-448-4848
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	billarmstrong@courtgalvanizinginc.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	707-448-4848
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Horse Creekulatis Creek
Certifier:	William Armstrong
Certifier Title:	General Manager
Certification Date:	23-JUN-15
Primary Sic:	3479-Coating, Engraving, and Allied Services, NEC
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

CIWQS:

Name:	COURT GALVANIZING INC
Address:	4937 ALLISON PKWY
City,State,Zip:	VACAVILLE, CA 95688
Agency:	Court Galvanizing
Agency Address:	4937 Allison Pkwy, Vacaville, CA 95688
Place/Project Type:	Industrial - Coating, Engraving, and Allied Services, NEC
SIC/NAICS:	3479
Region:	5S
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	5S48I012249
NPDES Number:	CAS000001

DRAFT

COURT GALVANIZING, INC. (Continued) **1007200286**

Adoption Date:	Not reported
Effective Date:	04/10/1996
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.38923
Longitude:	-121.965815

F18 **MARKHAM ELEMENTARY** **RCRA NonGen / NLR** **1025873287**
SW **101 MARKHAM AVE** **CAL000446413**
1/8-1/4 **VACAVILLE, CA 95688**
0.197 mi.
1041 ft. **Site 1 of 3 in cluster F**

Relative: **Higher**

Actual: **139 ft.**

RCRA Listings:

Date Form Received by Agency:	20190530
Handler Name:	Markham Elementary
Handler Address:	101 MARKHAM AVE
Handler City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAL000446413
Contact Name:	WILLIAM GLOVER
Contact Address:	353 BROWN ST
Contact City,State,Zip:	VACAVILLE, CA 95688
Contact Telephone:	707-453-6966
Contact Fax:	707-448-3729
Contact Email:	BHAMILTON@VACAVILLEUSD.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	353 BROWN ST
Mailing City,State,Zip:	VACAVILLE, CA 95688
Owner Name:	Vacaville Unified School District
Owner Type:	Other
Operator Name:	William Glover
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	Yes
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes

DRAFT

MARKHAM ELEMENTARY (Continued) **1025873287**

Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190628
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	WILLIAM GLOVER
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	353 BROWN ST
Owner/Operator City,State,Zip:	VACAVILLE, CA 95688
Owner/Operator Telephone:	707-453-6966
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	VACAVILLE UNIFIED SCHOOL DISTRICT
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	353 BROWN ST
Owner/Operator City,State,Zip:	VACAVILLE, CA 95688
Owner/Operator Telephone:	707-453-6966
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

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MARKHAM ELEMENTARY (Continued) **1025873287**

Historic Generators:
Receive Date: 20190530
Handler Name: MARKHAM ELEMENTARY
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 611110
NAICS Description: ELEMENTARY AND SECONDARY SCHOOLS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

F19 **VACAVILLE UNIFIED SCHOOL DIST** **RCRA NonGen / NLR** **1026825292**
SW **101 MARKHAM AVE** **CAL000003452**
1/8-1/4 **VACAVILLE, CA 95688**
0.197 mi.
1041 ft. **Site 2 of 3 in cluster F**

Relative:
Higher

Actual:
139 ft.

RCRA Listings:
Date Form Received by Agency: 20210617
Handler Name: Vacaville Unified School Dist
Handler Address: MARKHAM AVE
Handler City,State,Zip: VACAVILLE, CA 95688
EPA ID: CAL000003452
Contact Name: BARBRA MOLICA
Contact Address: BROWN ST
Contact City,State,Zip: VACAVILLE, CA 95688
Contact Telephone: 707-453-6966
Contact Fax: 707-448-3729
Contact Email: BHAMILTON@VACAVILLEUSD.ORG
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Not reported
State District Owner: Not reported
State District: Not reported
Mailing Address: BROWN ST
Mailing City,State,Zip: VACAVILLE, CA 95688
Owner Name: Not reported

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VACAVILLE UNIFIED SCHOOL DIST (Continued) **1026825292**

Owner Type:	Not reported
Operator Name:	Vacaville Usd
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210618
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: VACAVILLE USD	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	353 BROWN ST
Owner/Operator City,State,Zip:	VACAVILLE, CA 95688
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

DRAFT

VACAVILLE UNIFIED SCHOOL DIST (Continued) **1026825292**

Historic Generators:
Receive Date: 20210617
Handler Name: VACAVILLE UNIFIED SCHOOL DIST
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E20 **COURT GALVANIZING INC** **PFAS ECHO** **1027346785**
NNE **N/A**
1/8-1/4 **VACAVILLE, CA**
0.201 mi.
1059 ft. **Site 4 of 6 in cluster E**

Relative: **Higher**
Actual: **132 ft.**

PFAS ECHO:
Name: COURT GALVANIZING INC
Address: Not reported
City,State,Zip: VACAVILLE, CA
Latitude: 38.38948
Longitude: -121.96672
Count: 1
County: SOLANO
Status: Active
Region: 09
Industry: Metal Coating
ECHO Facility Report: https://echo.epa.gov/detailed-facility-report?fid=110000485822
Facility Percent Minority: 40.441
Facility Derived Tribes: -
Facility Population: 1616.51
EPA Programs: CWA; RCRA
Federal Facility: No
Federal Agency: -
Facility FIPS Code: 06095
Facility Indian Country Flag: N
Facility Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Facility Derived HUC: 18020109
Facility Derived WBD: 180201630503
Facility Derived CD113: 03
Facility Derived CB2010: 060952532061000
Facility Major Flag: -

DRAFT

COURT GALVANIZING INC (Continued) **1027346785**

Facility Active Flag:	Y
Facility Inspection Count:	0
Facility Date Last Inspection:	-
Facility Days Last Inspection:	-
Facility Informal Count:	0
Facility Date Last Informal Action:	-
Facility Formal Action Count:	0
Facility Date Last Formal Action:	-
Facility Total Penalties:	0
Facility Penalty Count:	-
Facility Date Last Penalty:	-
Facility Last Penalty AMT:	-
Facility QTRS With NC:	0
Facility Programs With SNC:	0
Facility Compliance Status:	No Violation Identified
Facility SNC Flag:	N
AIR Flag:	N
NPDES Flag:	Y
SDWIS Flag:	N
RCRA Flag:	Y
TRI Flag:	Y
GHG Flag:	N
AIR IDS:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-
NPDES IDS:	CAZ202038
CWA Permit Types:	Non-M
CWA NAICS:	-
CWA SICS:	3479
RCRA IDS:	CAL000126952
RCRA Permit Types:	LQG
RCRA NAICS:	332812
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	95688CRTGL4937A
TRI Releases Transfers:	25432
TRI On Site Releases:	10
TRI Off Site Transfers:	25,422
TRI Reporter:	Y
Facility IMP Water Flag:	-
EJSCREEN Flag US:	N
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-121.96672,%22y%22:38.38948,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

DRAFT

E21 **PG&E: VACAVILLE GRID CONTROL CENTER** **CERS TANKS** **S121745128**
NNE **4940 ALLISON PKWY** **CERS** **N/A**
1/8-1/4 **VACAVILLE, CA 95688**
0.202 mi.
1066 ft. **Site 5 of 6 in cluster E**

Relative:
Higher

Actual:
134 ft.

CERS TANKS:

Name:	PG&E: VACAVILLE GRID CONTROL CENTER
Address:	4940 ALLISON PKWY
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	143549
CERS ID:	10148481
CERS Description:	Aboveground Petroleum Storage

CERS:

Name:	PG&E: VACAVILLE GRID CONTROL CENTER
Address:	4940 ALLISON PKWY
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	143549
CERS ID:	10148481
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	143549
Site Name:	PG&E: Vacaville Grid Control Center
Violation Date:	08-02-2023
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Add the following to the HazMat Invetory: 1. Insulating Oil for Transformers.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	143549
Site Name:	PG&E: Vacaville Grid Control Center
Violation Date:	08-02-2023
Citation:	HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description:	Failure to address in the SPCC Plan the type of oil and storage capacity for each fixed container. For mobile or portable containers, either provide the type of oil and storage capacity, or an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities.
Violation Notes:	SPCC plan's Tank List's volume is greater than the CERS submittal. Update and determine if Insulating Oil should be put into the Inventory and the CERS total Capacity should be equivalentl
Violation Division:	Solano County Environmental Health
Violation Program:	APSA
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-01-2018
Violations Found:	No
Eval Type:	Routine done by local agency

DRAFT

PG&E: VACAVILLE GRID CONTROL CENTER (Continued) **S121745128**

Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-01-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-01-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-02-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Make the SPCC and HazMat Inventory match for oil based petroleum products. Complete by Sept05.2023.
Eval Division: Solano County Environmental Health
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-02-2023
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Add Insulating Oil for Transformers to the HazMat Inventory. Note: Complete the labeling for any Building where necessary. Complete by Sept05.2023.
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 143549
Facility Name: PG&E: Vacaville Grid Control Center
Env Int Type Code: APSA
Program ID: 10148481
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 38.389780
Longitude: -121.968030

Affiliation:
Affiliation Type Desc: CUPA District

DRAFT

PG&E: VACAVILLE GRID CONTROL CENTER (Continued) **S121745128**

Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,
Affiliation Type Desc:	Legal Owner
Entity Name:	Pacific Gas and Electric Company
Entity Title:	Not reported
Affiliation Address:	PO Box 7640
Affiliation City:	San Francisco
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94120
Affiliation Phone:	(415) 973-7000,
Affiliation Type Desc:	Document Preparer
Entity Name:	Cara Bateman
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Larry Jeffris
Entity Title:	Senior Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Michael Cardoso
Entity Title:	Not reported
Affiliation Address:	5555 Florin Perkins Road
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95826-4815
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	PG&E
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported

DRAFT

PG&E: VACAVILLE GRID CONTROL CENTER (Continued) **S121745128**

Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	PO Box 7640
Affiliation City:	San Francisco
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94120
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Pacific Gas and Electric Company
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 449-6610,

E22 **PG&E: VACAVILLE GRID CONTROL CENTER** **AST** **A100423417**
NNE **4940 ALLISON PKWY** **N/A**
1/8-1/4 **VACAVILLE, CA 95688**
0.202 mi.
1066 ft. **Site 6 of 6 in cluster E**

Relative: AST:
Higher

Actual:
134 ft.

Name:	PG&E: VACAVILLE GRID CONTROL CENTER
Address:	4940 ALLISON PKWY
City/Zip:	VACAVILLE,95688
Certified Unified Program Agencies:	Not reported
Owner:	Pacific Gas and Electric Company
Total Gallons:	Not reported
CERSID:	10148481
Facility ID:	48-000-501663
Business Name:	PG&E
Phone:	(415) 973-0028
Fax:	(415) 973-9234
Mailing Address:	PO Box 7640
Mailing Address City:	San Francisco
Mailing Address State:	CA
Mailing Address Zip Code:	94120
Operator Name:	Pacific Gas and Electric Company
Operator Phone:	707-317-4242
Owner Phone:	(415) 973-7000
Owner Mail Address:	c/o Environmental Services, 3401 Crow Canyon Road
Owner State:	CA
Owner Zip Code:	94583
Owner Country:	United States
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported

DRAFT

PG&E: VACAVILLE GRID CONTROL CENTER (Continued) **A100423417**

Property Owner Country: Not reported
EPAID: Not reported

F23 **LYNNEDAE FRANCE** **RCRA NonGen / NLR** **1025840579**
SW **196 MARKHAM AVE.** **CAC003020184**
1/8-1/4 **VACAVILLE, CA 95688**
0.204 mi.
1078 ft. **Site 3 of 3 in cluster F**

Relative: **Higher**

Actual: **142 ft.**

RCRA Listings:

Date Form Received by Agency:	20190618
Handler Name:	Lynnedae France
Handler Address:	196 MARKHAM AVE.
Handler City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAC003020184
Contact Name:	LYNNEDAE FRANCE
Contact Address:	196 MARKHAM AVE.
Contact City,State,Zip:	VACAVILLE, CA 95688
Contact Telephone:	707-999-6004
Contact Fax:	Not reported
Contact Email:	GILMEDRANO@SBCGLOBAL.NET
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	196 MARKHAM AVE.
Mailing City,State,Zip:	VACAVILLE, CA 95688
Owner Name:	Lynnedae France
Owner Type:	Other
Operator Name:	Lynnedae France
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No

DRAFT

LYNNEDAE FRANCE (Continued) **1025840579**

Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: LYNNEDAE FRANCE	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	196 MARKHAM AVE.
Owner/Operator City,State,Zip:	VACAVILLE, CA 95688
Owner/Operator Telephone:	707-999-6004
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: LYNNEDAE FRANCE	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	196 MARKHAM AVE.
Owner/Operator City,State,Zip:	VACAVILLE, CA 95688
Owner/Operator Telephone:	707-999-6004
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20190618
Handler Name: LYNNEDAE FRANCE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No

DRAFT

LYNNEDAE FRANCE (Continued) **1025840579**

Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

24
SSE
1/8-1/4
0.230 mi.
1213 ft.

NUT TREE RAILROAD
NUT TREE RD
VACAVILLE, CA 95688

CA FID UST **S101595158**
N/A

Relative:
Lower

Actual:
113 ft.

CA FID UST:
Facility ID: 48002163
Regulated By: UTNKA
Regulated ID: 00068570
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7074486411
Mail To: Not reported
Mailing Address: NUT TREE RD
Mailing Address 2: Not reported
Mailing City,St,Zip: NUT TREE 95696
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Facility ID: 48002163
Regulated By: UTNKI
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: NUT TREE RD
Mailing Address 2: Not reported
Mailing City,St,Zip: VACAVILLE 95688
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported

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NUT TREE RAILROAD (Continued) **S101595158**

Status: Inactive

G25 **MAINT DEPT (VACAVILLE USD) CASE #1** **UST FINDER RELEASE** **1029017861**
SSW **353 BROWN ST** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.384 mi.
2029 ft. **Site 1 of 5 in cluster G**

Relative: **Higher**
Actual: **142 ft.**

UST FINDER RELEASE:

Object ID:	45369
Facility ID:	Not reported
Lust ID:	CAT0609500362
Name:	MAINT DEPT (VACAVILLE USD) CASE #1
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Address Match Type:	StreetAddress
Reported Date:	Not reported
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	2460
Domestic Wells within 1500ft:	4
Land Use:	Developed, Medium Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	No
WHPA PWS Facility ID:	Not reported
WHPA Water Type:	Not reported
WHPA Facility Type:	Not reported
WHPA HUC12:	Not reported
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-121.97789
Y Coord:	38.3658100000001
Latitude:	38.36581
Longitude:	-121.97789

G26 **VACAVILLE UNIFIED SCHOOL DIST/BUS MAINT. YARD TOM** **LUST** **S101594982**
SSW **353 BROWN ST** **SWEEPS UST** **N/A**
1/4-1/2 **VACAVILLE, CA 95688** **CA FID UST**
0.384 mi. **Cortese**
2029 ft. **Site 2 of 5 in cluster G** **CERS**

Relative: **Higher**
Actual: **142 ft.**

LUST REG 5:

Name:	MAINT DEPT (VACAVILLE USD) CASE #1
Address:	353 BROWN ST
City:	VACAVILLE

DRAFT

VACAVILLE UNIFIED SCHOOL DIST/BUS MAINT. YARD TOM MEADOW (Continued) **S101594982**

Region: 5
Status: Case Closed
Case Number: 480104
Case Type: Soil only
Substance: WASTE OIL
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: N/A

SWEEPS UST:
Name: VACAVILLE UNIFIED SCHOOL DIST/BUS MAINT. YARD TOM MEADOW
Address: 353 BROWN ST
City: VACAVILLE
Status: Active
Comp Number: 50076
Number: 4
Board Of Equalization: 44-000099
Referral Date: 08-30-93
Action Date: 01-24-94
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 48-000-050076-000001
Tank Status: A
Capacity: 3000
Active Date: 08-30-93
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: 2

Name: VACAVILLE UNIFIED SCHOOL DIST/BUS MAINT. YARD TOM MEADOW
Address: 353 BROWN ST
City: VACAVILLE
Status: Active
Comp Number: 50076
Number: 4
Board Of Equalization: 44-000099
Referral Date: 08-30-93
Action Date: 01-24-94
Created Date: 02-29-88
Owner Tank Id: UL526134
SWRCB Tank Id: 48-000-050076-000002
Tank Status: A
Capacity: 12000
Active Date: 08-30-93
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 48000252
Regulated By: UTNKA
Regulated ID: 00064402
Cortese Code: Not reported

DRAFT

VACAVILLE UNIFIED SCHOOL DIST/BUS MAINT. YARD TOM MEADOW (Continued) **S101594982**

SIC Code: Not reported
Facility Phone: 7074466958
Mail To: Not reported
Mailing Address: 751 SCHOOL ST
Mailing Address 2: Not reported
Mailing City,St,Zip: VACAVILLE 95688
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CORTESE:
Name: MAINT DEPT (VACAVILLE USD) CASE #1
Address: 353 BROWN ST
City,State,Zip: VACAVILLE, CA 95688
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609500362
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:
Name: MAINT DEPT (VACAVILLE USD) CASE #1
Address: 353 BROWN ST
City,State,Zip: VACAVILLE, CA 95688
Site ID: 666730
CERS ID: T0609500362
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: SOLANO COUNTY - SOLANO COUNTY
Entity Title: Not reported
Affiliation Address: 675 TEXAS STREET, SUITE 2500
Affiliation City: FAIRFIELD
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported

DRAFT

VACAVILLE UNIFIED SCHOOL DIST/BUS MAINT. YARD TOM MEADOW (Continued) **S101594982**

Affiliation Phone: ,

G27 **VACAVILLE UNIFIED SCHOOL DIST** **LUST U003641495**
SSW **353 BROWN ST** **UST N/A**
1/4-1/2 **VACAVILLE, CA 95688** **Cortese**
0.384 mi.
2029 ft. **Site 3 of 5 in cluster G**

Relative:
Higher

Actual:
142 ft.

LUST REG 5:

Name:	VACAVILLE USD YARD CASE #2
Address:	353 BROWN ST
City:	VACAVILLE
Region:	5
Status:	Case Closed
Case Number:	480209
Case Type:	Drinking Water Aquifer affected
Substance:	GASOLINE
Staff Initials:	JIM
Lead Agency:	Local
Program:	LUST
MTBE Code:	4

SOLANO CO. UST:

Name:	VACAVILLE UNIFIED SCHOOL DIST
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Facility Id:	50076
Facility Status:	Inactive
Decode for Facility Status:	Closed
Facility Phone:	707-446-6966
Inventory Number:	1
Inventory Type:	Underground Storage Tank (1)
Inventory Description:	Not reported
Permit Expire/Last Service:	CONSULTATION - PHONE/COUNTER * Missing *
Last Service Date:	8/30/2017
District:	SUP-DIST NO 3031
Inspector:	Dubois, Tristan
Name:	VACAVILLE UNIFIED SCHOOL DIST
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Inventory Number:	2
Inventory Type:	Municipal Government (178)
Inventory Description:	Not reported
Permit Expire/Last Service:	ROUTINE - INITIAL (INVENTORIED) 03/31/22, 03/31/22
Last Service Date:	4/17/2020
District:	SUP-DIST NO 3031
Inspector:	Dubois, Tristan

UST:

Name:	VACAVILLE UNIFIED SCHOOL DIST
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Facility ID:	50076

DRAFT

VACAVILLE UNIFIED SCHOOL DIST (Continued) **U003641495**

Permitting Agency:	SOLANO COUNTY
CERSID:	Not reported
Latitude:	38.3672999
Longitude:	-121.9766271
Owner type:	Not reported
Facility type:	Not reported
Num of inuse ust:	Not reported
Num of closed ust:	Not reported
Num of oos ust:	Not reported
Epa region:	Not reported
Tribal lands:	Not reported
Tank owner name:	Not reported
Tank owner mailing address:	Not reported
Tank owner mailing city:	Not reported
Tank owner mailing zip:	Not reported
Tank owner mailing state:	Not reported
Tank operator name:	Not reported
Tank operator mailing address	Not reported
Tank operator mailing city:	Not reported
Tank operator mailing zip:	Not reported
Tank operator mailing state:	Not reported
Tankidnumber:	Not reported
Tank status:	Not reported
Tank configuration:	Not reported
Tank closure date:	Not reported
Tank installation date:	Not reported
Tank num of compartments:	Not reported
Tank contents:	Not reported
Tank capacity gallons:	Not reported
Tank type:	Not reported
Tank pc construction:	Not reported
Tank pwpiping construction:	Not reported
Tank piping type:	Not reported
Tank piping construction:	Not reported
Tank sacrificial anode:	Not reported
Tank cp impressed current:	Not reported
Tank cp shutoff:	Not reported
Tank alarms:	Not reported
Tank ball float:	Not reported
Tank spill bucket:	Not reported

CORTESE:

Name:	VACAVILLE USD YARD CASE #2
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0609500445
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported

DRAFT

VACAVILLE UNIFIED SCHOOL DIST (Continued) **U003641495**

Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

G28 **VACAVILLE USD YARD CASE #2** **UST FINDER RELEASE** **1029126181**
SSW **353 BROWN ST** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.384 mi.
2029 ft. **Site 4 of 5 in cluster G**

Relative:
Higher

Actual:
142 ft.

UST FINDER RELEASE:

Object ID:	45370
Facility ID:	Not reported
Lust ID:	CAT0609500445
Name:	VACAVILLE USD YARD CASE #2
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Address Match Type:	StreetAddress
Reported Date:	Not reported
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	2460
Domestic Wells within 1500ft:	4
Land Use:	Developed, Medium Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	No
WHPA PWS Facility ID:	Not reported
WHPA Water Type:	Not reported
WHPA Facility Type:	Not reported
WHPA HUC12:	Not reported
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-121.97789
Y Coord:	38.3658100000001
Latitude:	38.36581
Longitude:	-121.97789

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G29 **MAINTENANCE DEPARTMENT** **LUST** **U000072193**
SSW **353 BROWN** **HIST UST** **N/A**
1/4-1/2 **VACAVILLE, CA 94303** **HIST CORTESE**
0.384 mi. **HWTS**
2029 ft. **Site 5 of 5 in cluster G** **HAZNET**
NPDES
Relative: Higher **Notify 65**
WDS
Actual: 142 ft. **CIWQS**
CERS

SOLANO CO. LUST:

Name:	VACAVILLE UNIFIED SCHOOL DIST
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Region:	SOLANO
Facility ID:	50076
Facility Status:	I
Facility Status Desc:	Inactive
Facility Phone:	707-446-6966
Program:	29S
Inventory Number:	1
Inventory Type:	LOP - Closed Site (128)
Inventory Description:	Not reported
Last service/permit exp:	ISSUANCE OF A CLOSURE DOCUMENT
Last service date:	08/19/1999
District:	SUP-DIST NO 3036
Inspector:	Bernardo, Josuwa
Call Back:	Not reported

LUST:

Name:	VACAVILLE USD YARD CASE #2
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Lead Agency:	SOLANO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500445
Global Id:	T0609500445
Latitude:	38.3662228
Longitude:	-121.9778307
Status:	Completed - Case Closed
Status Date:	08/13/1999
Case Worker:	Not reported
RB Case Number:	480209
Local Agency:	SOLANO COUNTY
File Location:	Not reported
Local Case Number:	50076
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	07/08/1998
Leak Reported Date:	09/30/1998
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Stop Method: Not reported
Stop Description: Not reported
No Further Action Date: 08/13/1999
CA Water Watershed Name: Valley Putah-Cache - Elmira (511.10)
Dwr Groundwater Subbasin Name: Sacramento Valley - Solano (5-021.66)
Disadvantaged Community: Not reported
CA Enviroscreen 3 Score: 36-40%
CA Enviroscreen 4 Score: 50-55%
Military DOD Site: No
Facility Project Subtype: Not reported
RWQCB Region: CENTRAL VALLEY RWQCB (REGION 5S)
Site History: Not reported

LUST:
Global Id: T0609500445
Contact Type: Local Agency Caseworker
Contact Name: SOLANO COUNTY
Organization Name: SOLANO COUNTY
Address: 675 TEXAS STREET, SUITE 2500
City: FAIRFIELD
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0609500445
Action Type: Other
Date: 09/30/1998
Action: Leak Reported

Global Id: T0609500445
Action Type: Other
Date: 07/08/1998
Action: Leak Discovery

LUST:
Global Id: T0609500445
Status: Open - Case Begin Date
Status Date: 07/08/1998

Global Id: T0609500445
Status: Open - Site Assessment
Status Date: 07/08/1998

Global Id: T0609500445
Status: Completed - Case Closed
Status Date: 08/13/1999

Name: MAINT DEPT (VACAVILLE USD) CASE #1
Address: 353 BROWN ST
City,State,Zip: VACAVILLE, CA 95688
Lead Agency: SOLANO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500362
Global Id: T0609500362
Latitude: 38.3662228
Longitude: -121.9778307

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Status:	Completed - Case Closed
Status Date:	03/19/1996
Case Worker:	Not reported
RB Case Number:	480104
Local Agency:	SOLANO COUNTY
File Location:	Not reported
Local Case Number:	50076
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	07/05/1989
Leak Reported Date:	07/10/1989
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	03/19/1996
CA Water Watershed Name:	Valley Putah-Cache - Elmira (511.10)
Dwr Groundwater Subbasin Name:	Sacramento Valley - Solano (5-021.66)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	36-40%
CA Enviroscreen 4 Score:	50-55%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	CENTRAL VALLEY RWQCB (REGION 5S)
Site History:	Not reported

LUST:

Global Id:	T0609500362
Contact Type:	Local Agency Caseworker
Contact Name:	SOLANO COUNTY
Organization Name:	SOLANO COUNTY
Address:	675 TEXAS STREET, SUITE 2500
City:	FAIRFIELD
Email:	Not reported
Phone Number:	Not reported

LUST:

Global Id:	T0609500362
Action Type:	Other
Date:	07/10/1989
Action:	Leak Reported
Global Id:	T0609500362
Action Type:	Other
Date:	07/05/1989
Action:	Leak Discovery
Global Id:	T0609500362
Action Type:	RESPONSE
Date:	05/09/1989
Action:	Correspondence

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Global Id: T0609500362
Action Type: RESPONSE
Date: 07/17/1989
Action: Unauthorized Release Form

Global Id: T0609500362
Action Type: RESPONSE
Date: 07/10/1989
Action: Correspondence

Global Id: T0609500362
Action Type: ENFORCEMENT
Date: 03/19/1996
Action: Closure/No Further Action Letter

LUST:
Global Id: T0609500362
Status: Open - Case Begin Date
Status Date: 07/05/1989

Global Id: T0609500362
Status: Open - Site Assessment
Status Date: 07/10/1989

Global Id: T0609500362
Status: Completed - Case Closed
Status Date: 03/19/1996

HIST UST:
Name: MAINTENANCE SHOP
Address: 353 BROWN STREET
City,State,Zip: VACAVILLE, CA 95688
File Number: 00021416
URL: https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/00021416.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

DRAFT

MAINTENANCE DEPARTMENT (Continued) **U000072193**

Click here for Geo Tracker PDF:

HIST CORTESE:

edr_fname:	MAINT DEPT (VACAVILLE USD
edr_fadd1:	353 BROWN
City,State,Zip:	VACAVILLE, CA 95688
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	480104

edr_fname:	VACAVILLE USD YARD CAS
edr_fadd1:	353 BROWN
City,State,Zip:	VACAVILLE, CA 95688
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	480209

HWTS:

Name:	WLLIAM GLOVER
Address:	353 BROWN ST
Address 2:	Not reported
City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAC003116841
Inactive Date:	07/27/2021
Create Date:	04/27/2021
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	353 BROWN ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	VACAVILLE, CA 956882913
Owner Name:	VACAVILLE USD
Owner Address:	401 NUT TREE RD
Owner Address 2:	Not reported
Owner City,State,Zip:	VACAVILLE, CA 956873508
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	SHERYL MATEO
Contact Address:	401 NUT TREE RD
Contact Address 2:	Not reported
City,State,Zip:	VACAVILLE, CA 956882913
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	38.36608102
Longitude:	-121.97833

NAICS:

EPA ID:	CAC003116841
Create Date:	2021-04-27 09:39:26.113
NAICS Code:	56291
NAICS Description:	Remediation Services
Issued EPA ID Date:	2021-04-27 09:39:26.11700
Inactive Date:	Not reported

DRAFT

MAINTENANCE DEPARTMENT (Continued) **U000072193**

Facility Name:	WLLIAM GLOVER
Facility Address:	353 BROWN ST
Facility Address 2:	Not reported
Facility City:	VACAVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	956882913

HAZNET:

Name:	WLLIAM GLOVER
Address:	353 BROWN ST
Address 2:	Not reported
City,State,Zip:	VACAVILLE, CA 956882913
Contact:	SHERYL MATEO
Telephone:	7074536255
Mailing Name:	Not reported
Mailing Address:	353 BROWN ST
Year:	2021
Gepaid:	CAC003116841
TSD EPA ID:	CAD982042475
CA Waste Code:	151 - Asbestos containing waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.23

NPDES:

Name:	BUS MAINTENANCE FACILITY
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	5S48I018335
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	09/11/2003
Operator Name:	Vacaville Unified School District
Operator Address:	Not reported
Operator City:	Not reported

DRAFT

MAINTENANCE DEPARTMENT (Continued) **U000072193**

Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	202060
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S48I018335
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	09/11/2003
Status:	Active
Status Date:	09/11/2003
Place Size:	5
Place Size Unit:	Acres
Contact:	LELAND NOLL
Contact Title:	Director of Mainteance
Contact Phone:	707-453-6966
Contact Phone Ext:	Not reported
Contact Email:	bhamilton@vacavilleusd.org
Operator Name:	Vacaville Unified School District
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Private Individual
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	707-453-6966
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Rain water
Certifier:	Leland Noll
Certifier Title:	Administrative Secretary
Certification Date:	24-APR-17
Primary Sic:	4151-School Buses
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	202060
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S48I018335
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/11/2003
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Vacaville Unified School District
Discharge Address:	401 Nut Tree Rd
Discharge City:	Vacaville
Discharge State:	California
Discharge Zip:	95687
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	BUS MAINTENANCE FACILITY
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Facility Status:	Active
NPDES Number:	CAS000001
Region:	5S
Agency Number:	0
Regulatory Measure ID:	202060
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	5S48I018335
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/11/2003

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	401 Nut Tree Rd
Discharge Name:	Vacaville Unified School District
Discharge City:	Vacaville
Discharge State:	California
Discharge Zip:	95687
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	202060
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S48I018335
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	09/11/2003
Status:	Active
Status Date:	09/11/2003
Place Size:	5
Place Size Unit:	Acres
Contact:	LELAND NOLL
Contact Title:	Director of Mainteance
Contact Phone:	707-453-6966
Contact Phone Ext:	Not reported
Contact Email:	bhamilton@vacavilleusd.org
Operator Name:	Vacaville Unified School District
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Private Individual
Developer:	Not reported

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	707-453-6966
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Rain water
Certifier:	Leland Noll
Certifier Title:	Administrative Secretary
Certification Date:	24-APR-17
Primary Sic:	4151-School Buses
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	202060
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S48I018335
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/11/2003
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Vacaville Unified School District
Discharge Address:	401 Nut Tree Rd
Discharge City:	Vacaville
Discharge State:	California
Discharge Zip:	95687
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

NOTIFY 65:

Name:	MAINTENANCE DEPARTMENT
Address:	353 BROWN

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

City,State,Zip: VACAVILLE, CA 94303
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported
Global ID: Not reported
Status: Not reported

WDS:
Name: BUS MAINTENANCE FACILITY
Address: 353 Brown St
City: VACAVILLE
Facility ID: 5S 48I018335
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 0
Facility Telephone: 7074696969
Facility Contact: George Durnay
Agency Name: VACAVILLE UNIFIED SCH DIST
Agency Address: 751 School St
Agency City,St,Zip: Vacaville 956883945
Agency Contact: George Durnay
Agency Telephone: 7074696969
Agency Type: Special District (Includes districts established under general acts, sanitary districts, water districts irrigation districts, etc.)
SIC Code: 0
SIC Code 2: Not reported
Primary Waste Type: Not reported
Primary Waste: Not reported
Waste Type2: Not reported
Waste2: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: Not reported
POTW: Not reported
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CIWQS:

Name:	BUS MAINTENANCE FACILITY
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Agency:	Vacaville Unified School District
Agency Address:	401 Nut Tree Rd, Vacaville, CA 95687
Place/Project Type:	Industrial - School Buses
SIC/NAICS:	4151
Region:	5S
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	5S48I018335
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	09/11/2003
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.365848
Longitude:	-121.977855

CERS:

Name:	BUS MAINTENANCE FACILITY
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	528082
CERS ID:	212167
CERS Description:	Industrial Facility Storm Water

Violations:

Site ID:	528082
Site Name:	Bus Maintenance Facility
Violation Date:	10-14-2010
Citation:	2014-0057-DWQ - Industrial General Permit
Violation Description:	SW - Deficient BMP Implementation
Violation Notes:	Failure to maintain stormwater BMPs. Exceedance of EPA benchmarks.
Violation Division:	Water Boards
Violation Program:	INDSTW
Violation Source:	SMARTS,

Site ID:	528082
Site Name:	Bus Maintenance Facility
Violation Date:	03-30-2006
Citation:	2014-0057-DWQ - Industrial General Permit
Violation Description:	SW - Deficient Report

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Violation Notes: NOV for submitting an incomplete annual report for 2005/2006
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 528082
Site Name: Bus Maintenance Facility
Violation Date: 07-01-2009
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient BMP Implementation
Violation Notes: Failure to maintain stormwater BMPs. Exceedance of EPA benchmarks.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 528082
Site Name: Bus Maintenance Facility
Violation Date: 01-01-2018
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Late Report
Violation Notes: Late level 2 ERA Action Plan
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Site ID: 528082
Site Name: Bus Maintenance Facility
Violation Date: 07-01-2007
Citation: 2014-0057-DWQ - Industrial General Permit
Violation Description: SW - Deficient BMP Implementation
Violation Notes: Failure to maintain stormwater BMPs. Exceedance of EPA benchmarks.
Violation Division: Water Boards
Violation Program: INDSTW
Violation Source: SMARTS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-14-2012
Violations Found: No
Eval Type: Industrial Storm Water Compliance Evaluation
Eval Notes: On 14 March 2012, Central Valley Regional Water Quality Control Board staff inspected the Vacaville Unified School District Bus Maintenance Facility located at 353 Brown Street in Vacaville. During site inspection staff determined that he SWPPP was generally complete and the inspection reports were up to date. The facility conducts storm water training on a yearly basis. The site is a bus maintenance and vehicle maintenance facility for the Vacaville Unified School District. The entire facility had an asphalt surface. The facility has about 36 buses and other vehicles. The facility also has mowers trailers and other grounds and school maintenance equipment. In total about 75 -100 total pieces of equipment. The facility had multiple storm drains on the asphalt surface. The surface of the asphalt was clean. The facility sweeps on a regular basis. The facility had a bus wash area. The bus wash area had a concrete surface and wash water was contained in sump. The sump flows through an oil water separator which is cleaned out twice a year.
Eval Division: Water Boards

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Eval Program: INDSTW
Eval Source: SMARTS,

Enforcement Action:
Site ID: 528082
Site Name: Bus Maintenance Facility
Site Address: 353 BROWN ST
Site City: VACAVILLE
Site Zip: 95688
Enf Action Date: 03-30-2007
Enf Action Type: Notice of Violation
Enf Action Description: Notice of Violation
Enf Action Notes: NOV for submitting incomplete annual report for 2005/2006.
Enf Action Division: Water Boards
Enf Action Program: INDSTW
Enf Action Source: SMARTS,

Site ID: 528082
Site Name: Bus Maintenance Facility
Site Address: 353 BROWN ST
Site City: VACAVILLE
Site Zip: 95688
Enf Action Date: 05-01-2008
Enf Action Type: Staff Enforcement Letter
Enf Action Description: Staff Enforcement Letter
Enf Action Notes: SEL for exceedance of benchmark values in storm water discharges, indicating a need to improve BMPs.
Enf Action Division: Water Boards
Enf Action Program: INDSTW
Enf Action Source: SMARTS,

Site ID: 528082
Site Name: Bus Maintenance Facility
Site Address: 353 BROWN ST
Site City: VACAVILLE
Site Zip: 95688
Enf Action Date: 10-14-2010
Enf Action Type: Staff Enforcement Letter
Enf Action Description: Staff Enforcement Letter
Enf Action Notes: SEL for exceedance of benchmark values in storm water discharges, indicating a need to improve BMPs.
Enf Action Division: Water Boards
Enf Action Program: INDSTW
Enf Action Source: SMARTS,

Site ID: 528082
Site Name: Bus Maintenance Facility
Site Address: 353 BROWN ST
Site City: VACAVILLE
Site Zip: 95688
Enf Action Date: 02-23-2018
Enf Action Type: Notice of Violation
Enf Action Description: Notice of Violation
Enf Action Notes: Late level 2 ERA Action Plan
Enf Action Division: Water Boards
Enf Action Program: INDSTW
Enf Action Source: SMARTS,

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MAINTENANCE DEPARTMENT (Continued) **U000072193**

Site ID:	528082
Site Name:	Bus Maintenance Facility
Site Address:	353 BROWN ST
Site City:	VACAVILLE
Site Zip:	95688
Enf Action Date:	10-23-2009
Enf Action Type:	Staff Enforcement Letter
Enf Action Description:	Staff Enforcement Letter
Enf Action Notes:	SEL for exceedance of benchmark values in storm water discharges indicating a need to improve BMPs.
Enf Action Division:	Water Boards
Enf Action Program:	INDSTW
Enf Action Source:	SMARTS,

Affiliation:

Affiliation Type Desc:	Owner/Operator
Entity Name:	Vacaville Unified School District
Entity Title:	Operator
Affiliation Address:	401 Nut Tree Rd
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95687
Affiliation Phone:	,

Name:	VACAVILLE USD YARD CASE #2
Address:	353 BROWN ST
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	695122
CERS ID:	T0609500445
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

H30 **SHELL SERVICE STATION** **RCRA-SQG 1005904535**
SSE **1611 E MONTE VISTA** **LUST CAR000127506**
1/4-1/2 **VACAVILLE, CA 95688** **FINDS**
0.384 mi. **ECHO**
2030 ft. **Site 1 of 5 in cluster H** **HWTS**
HAZNET
Relative: Higher **CERS**

Actual: 127 ft.

RCRA Listings:

Date Form Received by Agency:	20020903
Handler Name:	Shell Service Station
Handler Address:	1611 E MONTE VISTA
Handler City,State,Zip:	VACAVILLE, CA 95688

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SHELL SERVICE STATION (Continued) **1005904535**

EPA ID:	CAR000127506
Contact Name:	SONDRA BIENVENU
Contact Address:	P O BOX 2648
Contact City,State,Zip:	HOUSTON, TX 77252-2648
Contact Telephone:	713-241-5036
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	P O BOX 2648
Mailing City,State,Zip:	HOUSTON, TX 77252-2648
Owner Name:	Equilon Enterprises Llc Dba
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20021107
Recognized Trader-Importer:	No

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SHELL SERVICE STATION (Continued) **1005904535**

Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D018
Waste Description:	Benzene

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	EQUILON ENTERPRISES LLC DBA
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P O BOX 2648
Owner/Operator City,State,Zip:	HOUSTON, TX 77252-2648
Owner/Operator Telephone:	713-241-5036
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20020903
Handler Name:	SHELL SERVICE STATION
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

SOLANO CO. LUST:

Name:	SHELL MONTE VISTA

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SHELL SERVICE STATION (Continued) **1005904535**

Address:	1611 E MONTE VISTA AVE
City,State,Zip:	VACAVILLE, CA 95688
Region:	SOLANO
Facility ID:	50037
Facility Status:	I
Facility Status Desc:	Inactive
Facility Phone:	707-448-7731
Program:	29S
Inventory Number:	1
Inventory Type:	LOP - Closed Site (128)
Inventory Description:	Closure Date = 11/13/2015
Last service/permit exp:	REVIEW REPORTS / POST REM MONIT * Missing *
Last service date:	11/13/2015
District:	SUP-DIST NO 3036
Inspector:	Bernardo, Josuwa
Call Back:	Not reported

LUST:

Name:	SHELL CASE #2
Address:	1611 E. MONTE VISTA
City,State,Zip:	VACAVILLE, CA 95688
Lead Agency:	SOLANO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609518478
Global Id:	T0609518478
Latitude:	38.366437
Longitude:	-121.964288
Status:	Completed - Case Closed
Status Date:	11/13/2015
Case Worker:	Not reported
RB Case Number:	480223
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	50037
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	* Petroleum - Automotive gasolines
EPA Region:	9
Coordinate Source:	Google Map Move
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	08/25/2004
Leak Reported Date:	08/25/2004
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Close and Remove Tank
Stop Description:	Not reported
No Further Action Date:	11/13/2015
CA Water Watershed Name:	Valley Putah-Cache - Elmira (511.10)
Dwr Groundwater Subbasin Name:	Sacramento Valley - Solano (5-021.66)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	51-55%
CA Enviroscreen 4 Score:	55-60%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	CENTRAL VALLEY RWQCB (REGION 5S)

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SHELL SERVICE STATION (Continued) **1005904535**

Site History: Not reported

LUST:
Global Id: T0609518478
Contact Type: Regional Board Caseworker
Contact Name: ALAN M. BUEHLER
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 Sun Center Dr
City: RANCHO CORDOVA
Email: alan.buehler@waterboards.ca.gov
Phone Number: 9164644615

LUST:
Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 08/31/2004
Action: Site Visit / Inspection / Sampling

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 08/30/2004
Action: Notice of Responsibility

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 12/28/2013
Action: Staff Letter

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 11/13/2015
Action: Closure/No Further Action Letter

Global Id: T0609518478
Action Type: Other
Date: 08/25/2004
Action: Leak Reported

Global Id: T0609518478
Action Type: REMEDIATION
Date: 08/30/2004
Action: Excavation

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 05/24/2007
Action: File review

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 01/08/2008
Action: File review

Global Id: T0609518478
Action Type: RESPONSE
Date: 06/24/2015
Action: Well Destruction Workplan - Regulator Responded

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 06/17/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 06/14/2007
Action: Site Visit / Inspection / Sampling

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 11/29/2010
Action: Site Visit / Inspection / Sampling

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 06/21/2011
Action: File review

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 11/15/2004
Action: * Historical Enforcement

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 01/26/2005
Action: File review

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 12/01/2004
Action: Site Visit / Inspection / Sampling

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 03/05/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 06/25/2015
Action: Staff Letter

Global Id: T0609518478
Action Type: ENFORCEMENT
Date: 06/14/2014
Action: Notification - Public Notice of Case Closure

Global Id: T0609518478
Action Type: Other
Date: 08/25/2004
Action: Leak Discovery

Global Id: T0609518478
Action Type: RESPONSE

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Date: 12/05/2008
Action: Monitoring Report - Quarterly

LUST:
Global Id: T0609518478
Status: Open - Case Begin Date
Status Date: 08/25/2004

Global Id: T0609518478
Status: Open - Site Assessment
Status Date: 08/30/2004

Global Id: T0609518478
Status: Open - Site Assessment
Status Date: 11/08/2004

Global Id: T0609518478
Status: Open - Site Assessment
Status Date: 08/01/2005

Global Id: T0609518478
Status: Open - Verification Monitoring
Status Date: 08/01/2005

Global Id: T0609518478
Status: Open - Eligible for Closure
Status Date: 08/06/2013

Global Id: T0609518478
Status: Open - Eligible for Closure
Status Date: 06/24/2014

Global Id: T0609518478
Status: Completed - Case Closed
Status Date: 11/13/2015

FINDS:
Registry ID: 110013293266

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.
California's Hazardous Waste Tracking System Data Mart (HWTS-DATAMART) provides information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Envid: 1005904535
Registry ID: 110013293266
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110013293266
Name: SHELL SERVICE STATION
Address: 1611 E MONTE VISTA
City,State,Zip: VACAVILLE, CA 95688

HWTS:
Name: SHELL SERVICE STATION
Address: 1611 E MONTE VISTA S A P 139633
Address 2: Not reported
City,State,Zip: VACAVILLE, CA 95688
EPA ID: CAR000127506
Inactive Date: Not reported
Create Date: 03/04/2003
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 7180 BROADWAY
Mailing Address 2: Not reported
Mailing City,State,Zip: LEMON GROVE, CA 91945
Owner Name: MILAD PAUL
Owner Address: 7180 BROADWAY
Owner Address 2: Not reported
Owner City,State,Zip: LEMON GROVE, CA 91945
Owner Phone: Not reported
Owner Fax: Not reported
Contact Name: KIM KWOK
Contact Address: 6520 CORPORATE DRIVE
Contact Address 2: Not reported
City,State,Zip: INDIANAPOLIS, IN 462780000
Contact Phone: Not reported
Contact Fax: Not reported
Facility Status: Active
Facility Type: PERMANENT
Category: FEDERAL
Latitude: 38.36691
Longitude: -121.965957

NAICS:
EPA ID: CAR000127506
Create Date: 2003-10-23 13:13:52.000
NAICS Code: 44711
NAICS Description: Gasoline Stations with Convenience Stores
Issued EPA ID Date: 2003-03-04 14:25:35.18700
Inactive Date: Not reported
Facility Name: SHELL SERVICE STATION
Facility Address: 1611 E Monte Vista
Facility Address 2: S A P 139633
Facility City: Vacaville
Facility County: Not reported
Facility State: CA
Facility Zip: 95688

HAZNET:
Name: SHELL SERVICE STATION
Address: 1611 E MONTE VISTA

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Address 2:	Not reported
City,State,Zip:	VACAVILLE, CA 95688
Contact:	Adam Estes
Telephone:	3172917007
Mailing Name:	Not reported
Mailing Address:	PO BOX 3127
Year:	2004
Gepaid:	CAR000127506
TSD EPA ID:	CAD009466392
CA Waste Code:	512 - Other empty containers 30 gallons or more
Disposal Method:	-
Tons:	0.6
Year:	2004
Gepaid:	CAR000127506
TSD EPA ID:	CAD009452657
CA Waste Code:	134 - Aqueous solution with total organic residues less than 10 percent
Disposal Method:	R01 - Recycler
Tons:	10.5
Year:	2004
Gepaid:	CAR000127506
TSD EPA ID:	CAD009466392
CA Waste Code:	512 - Other empty containers 30 gallons or more
Disposal Method:	R01 - Recycler
Tons:	1.25
Year:	2004
Gepaid:	CAR000127506
TSD EPA ID:	CAD009466392
CA Waste Code:	512 - Other empty containers 30 gallons or more
Disposal Method:	D99 - Disposal, Other
Tons:	15
Year:	2004
Gepaid:	CAR000127506
TSD EPA ID:	CAD009452657
CA Waste Code:	134 - Aqueous solution with total organic residues less than 10 percent
Disposal Method:	-
Tons:	10.5
Year:	2004
Gepaid:	CAR000127506
TSD EPA ID:	WAD991281767
CA Waste Code:	352 - Other organic solids
Disposal Method:	R01 - Recycler
Tons:	0.055
Year:	2003
Gepaid:	CAR000127506
TSD EPA ID:	CAD028409019
CA Waste Code:	352 - Other organic solids
Disposal Method:	H01 - Transfer Station
Tons:	0.015

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Year:	2002
Gepaid:	CAR000127506
TSD EPA ID:	CAD028409019
CA Waste Code:	241 - Tank bottom waste
Disposal Method:	T01 - Treatment, Tank
Tons:	0.68805

Year:	2002
Gepaid:	CAR000127506
TSD EPA ID:	CAD028409019
CA Waste Code:	352 - Other organic solids
Disposal Method:	H01 - Transfer Station
Tons:	0.015

Additional Info:

Year:	2004
Gen EPA ID:	CAR000127506
Shipment Date:	20040915
Creation Date:	12/22/2004 18:31:08
Receipt Date:	20040915
Manifest ID:	23570907
Trans EPA ID:	CAD982030173
Trans Name:	ECOLOGY CONTROL INDUSTRIES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009466392
Trans Name:	ECOLOGY CONTROL INDUSTRIES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	NONE
Meth Code:	R01 - Recycler
Quantity Tons:	1.25
Waste Quantity:	2500
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20040820
Creation Date:	1/4/2005 18:32:14
Receipt Date:	20040823
Manifest ID:	22728058
Trans EPA ID:	CAD982030173
Trans Name:	ECOLOGY CONTROL INDUSTRIES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009466392
Trans Name:	ECOLOGY CONTROL INDUSTRIES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Meth Code:	D99 - Disposal, Other
Quantity Tons:	4.5
Waste Quantity:	9000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20040820
Creation Date:	1/4/2005 18:32:14
Receipt Date:	20040823
Manifest ID:	22728059
Trans EPA ID:	CAD982030173
Trans Name:	ECOLOGY CONTROL INDUSTRIES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009466392
Trans Name:	ECOLOGY CONTROL INDUSTRIES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	D99 - Disposal, Other
Quantity Tons:	7.5
Waste Quantity:	15000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20040820
Creation Date:	1/4/2005 18:32:14
Receipt Date:	20040823
Manifest ID:	22728060
Trans EPA ID:	CAD982030173
Trans Name:	ECOLOGY CONTROL INDUSTRIES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009466392
Trans Name:	ECOLOGY CONTROL INDUSTRIES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	D99 - Disposal, Other
Quantity Tons:	3
Waste Quantity:	6000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Shipment Date:	20040819
Creation Date:	1/4/2005 18:33:27
Receipt Date:	20040820
Manifest ID:	22728062
Trans EPA ID:	CAD982030173
Trans Name:	ECOLOGY CONTROL INDUSTRIES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009452657
Trans Name:	ROMIC ENVIRONMENTAL
TSDF Alt EPA ID:	CAD009452657
TSDF Alt Name:	Not reported
Waste Code Description:	134 - Aqueous solution with <10% total organic residues
RCRA Code:	D001
Meth Code:	R01 - Recycler
Quantity Tons:	10.5
Waste Quantity:	2500
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20040819
Creation Date:	1/4/2005 18:32:14
Receipt Date:	20040823
Manifest ID:	22728061
Trans EPA ID:	CAD982030173
Trans Name:	ECOLOGY CONTROL INDUSTRIES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009466392
Trans Name:	ECOLOGY CONTROL INDUSTRIES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.6
Waste Quantity:	1200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20040819
Creation Date:	12/9/2004 18:30:59
Receipt Date:	Not reported
Manifest ID:	22728062
Trans EPA ID:	CAD982030173
Trans Name:	ECOLOGY CONTROL INDUSTRIES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009452657

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Trans Name:	ROMIC ENVIRONMENTAL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	134 - Aqueous solution with <10% total organic residues
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	10.5
Waste Quantity:	2500
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20040810
Creation Date:	1/4/2005 18:33:27
Receipt Date:	20040823
Manifest ID:	23608302
Trans EPA ID:	CAR000052803
Trans Name:	PHILIP TRANSPORTATION & REMEDIATION INC
Trans 2 EPA ID:	UTR000007708
Trans 2 Name:	SLT EXPRESS
TSDF EPA ID:	WAD991281767
Trans Name:	BURLINGTON ENVIRONMENTAL INC KENT
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	NA
Meth Code:	R01 - Recycler
Quantity Tons:	0.0175
Waste Quantity:	35
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20040205
Creation Date:	8/20/2004 9:31:41
Receipt Date:	20040211
Manifest ID:	22974799
Trans EPA ID:	CAR000052803
Trans Name:	PHILIP TRANSPORTATION & REMEDIATION INC
Trans 2 EPA ID:	UTD981552425
Trans 2 Name:	SLT EXPRESS
TSDF EPA ID:	WAD991281767
Trans Name:	BURLINGTON ENVIRONMENTAL INC KENT
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.0375
Waste Quantity:	75
Quantity Unit:	P

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 2003
Gen EPA ID: CAR000127506

Shipment Date: 20030310
Creation Date: 8/29/2003 18:31:02
Receipt Date: 20030324
Manifest ID: 22249129
Trans EPA ID: CAR000006098
Trans Name: Not reported
Trans 2 EPA ID: CAD980 24480
Trans 2 Name: Not reported
TSDF EPA ID: CAD028409019
Trans Name: Not reported
TSDF Alt EPA ID: CAD028409019
TSDF Alt Name: Not reported
Waste Code Description: 352 - Other organic solids
RCRA Code: D018
Meth Code: H01 - Transfer Station
Quantity Tons: 0.015
Waste Quantity: 30
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 2002
Gen EPA ID: CAR000127506

Shipment Date: 20021211
Creation Date: 4/10/2003 10:20:47
Receipt Date: 20021218
Manifest ID: 22248804
Trans EPA ID: CAR000006098
Trans Name: Not reported
Trans 2 EPA ID: CAD982524480
Trans 2 Name: Not reported
TSDF EPA ID: CAD028409019
Trans Name: Not reported
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 352 - Other organic solids
RCRA Code: D018
Meth Code: H01 - Transfer Station
Quantity Tons: 0.015
Waste Quantity: 30
Quantity Unit: P

DRAFT

SHELL SERVICE STATION (Continued) **1005904535**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20020925
Creation Date:	1/28/2003 18:31:46
Receipt Date:	20020930
Manifest ID:	21851423
Trans EPA ID:	CAR000118992
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD028409019
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	241 - Tank bottom waste 251 Still bottoms with halogenated organics
RCRA Code:	D001
Meth Code:	T01 - Treatment, Tank
Quantity Tons:	0.68805
Waste Quantity:	165
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	SHELL CASE #2
Address:	1611 E. MONTE VISTA
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	685012
CERS ID:	T0609518478
CERS Description:	Leaking Underground Storage Tank Cleanup Site

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H31 **SHELL** **UST FINDER RELEASE** **1029106603**
SSE **1611 MONTE VISTA AVE E** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.384 mi.
2030 ft. **Site 2 of 5 in cluster H**

Relative: **Higher**

Actual: **127 ft.**

UST FINDER RELEASE:

Object ID:	45541
Facility ID:	Not reported
Lust ID:	CAT0609500355
Name:	SHELL
Address:	1611 MONTE VISTA AVE E
City,State,Zip:	VACAVILLE, CA 95688
Address Match Type:	PointAddress
Reported Date:	Not reported
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	6
Domestic Wells within 1500ft:	0

DRAFT

SHELL (Continued) **1029106603**

Land Use:	Developed, Medium Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	No
WHPA PWS Facility ID:	Not reported
WHPA Water Type:	Not reported
WHPA Facility Type:	Not reported
WHPA HUC12:	Not reported
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-121.96399
Y Coord:	38.36609
Latitude:	38.36609
Longitude:	-121.963989999999

H32 **SHELL CASE #2** **UST FINDER RELEASE** **1029105253**
SSE **1611 E. MONTE VISTA** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.384 mi.
2030 ft. **Site 3 of 5 in cluster H**

Relative: **Higher**
Actual: **127 ft.**

UST FINDER RELEASE:

Object ID:	45542
Facility ID:	Not reported
Lust ID:	CAT0609518478
Name:	SHELL CASE #2
Address:	1611 E. MONTE VISTA
City,State,Zip:	VACAVILLE, CA 95688
Address Match Type:	PointAddress
Reported Date:	Not reported
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	6
Domestic Wells within 1500ft:	0
Land Use:	Developed, Medium Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	No
WHPA PWS Facility ID:	Not reported
WHPA Water Type:	Not reported
WHPA Facility Type:	Not reported
WHPA HUC12:	Not reported
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9

DRAFT

SHELL CASE #2 (Continued) **1029105253**

NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-121.96399
Y Coord:	38.36609
Latitude:	38.36609
Longitude:	-121.963989999999

H33 **SHELL** **LUST** **S104493332**
SSE **1611 MONTE VISTA AVE E** **Cortese** **N/A**
1/4-1/2 **VACAVILLE, CA 95688** **HIST CORTESE**
0.384 mi. **CIWQS**
2030 ft. **Site 4 of 5 in cluster H** **CERS**

Relative: **Higher**
Actual: **127 ft.**

LUST:

Name:	SHELL
Address:	1611 MONTE VISTA AVE E
City,State,Zip:	VACAVILLE, CA 95688
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500355
Global Id:	T0609500355
Latitude:	38.3664592339717
Longitude:	-121.964170708707
Status:	Completed - Case Closed
Status Date:	09/28/1992
Case Worker:	Not reported
RB Case Number:	480095
Local Agency:	SOLANO COUNTY
File Location:	Not reported
Local Case Number:	50037
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Map Move
Cuf Case:	NO
Quantity Released Gallons:	2
Begin Date:	10/01/1988
Leak Reported Date:	01/07/1993
How Discovered:	Other Means
How Discovered Description:	Not reported
Discharge Source:	Piping
Discharge Cause:	Physc / Mech Damage
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	09/28/1992
CA Water Watershed Name:	Valley Putah-Cache - Elmira (511.10)
Dwr Groundwater Subbasin Name:	Sacramento Valley - Solano (5-021.66)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	36-40%
CA Enviroscreen 4 Score:	50-55%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	CENTRAL VALLEY RWQCB (REGION 5S)
Site History:	Not reported

DRAFT

SHELL (Continued) **S104493332**

LUST:
Global Id: T0609500355
Contact Type: Local Agency Caseworker
Contact Name: SOLANO COUNTY
Organization Name: SOLANO COUNTY
Address: 675 TEXAS STREET, SUITE 2500
City: FAIRFIELD
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0609500355
Action Type: Other
Date: 01/07/1993
Action: Leak Reported

Global Id: T0609500355
Action Type: Other
Date: 10/01/1988
Action: Leak Discovery

Global Id: T0609500355
Action Type: Other
Date: 10/01/1988
Action: Leak Stopped

LUST:
Global Id: T0609500355
Status: Open - Case Begin Date
Status Date: 10/01/1988

Global Id: T0609500355
Status: Completed - Case Closed
Status Date: 09/28/1992

LUST REG 5:
Name: SHELL
Address: 1611 MONTE VISTA AVE E
City: VACAVILLE
Region: 5
Status: Case Closed
Case Number: 480095
Case Type: Soil only
Substance: GASOLINE
Staff Initials: JIM
Lead Agency: Regional
Program: LUST
MTBE Code: N/A

CORTESE:
Name: SHELL
Address: 1611 MONTE VISTA AVE E
City,State,Zip: VACAVILLE, CA 95688
Region: CORTESE

DRAFT

SHELL (Continued) **S104493332**

Envirostor Id:	Not reported
Global ID:	T0609500355
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	SHELL
edr_fadd1:	1611 MONTE VISTA
City,State,Zip:	VACAVILLE, CA 95688
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	480095

CIWQS:

Name:	NUT TREE RETAIL PHASE 2
Address:	1611 EAST MONTE VISTA AVE
City,State,Zip:	VACAVILLE, CA 95688
Agency:	Nut Tree Retail Phase 2 LLC
Agency Address:	100 Shoreline Highway Building B Suite 310, Mill Valley, CA 94941
Place/Project Type:	Construction - Commercial
SIC/NAICS:	Not reported
Region:	5S
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	5S48C366727
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	06/06/2013
Termination Date:	04/17/2014
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.366814

DRAFT

SHELL (Continued) **S104493332**

Longitude: -121.963817

CERS:
Name: SHELL
Address: 1611 MONTE VISTA AVE E
City,State,Zip: VACAVILLE, CA 95688
Site ID: 684641
CERS ID: T0609500355
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: SOLANO COUNTY - SOLANO COUNTY
Entity Title: Not reported
Affiliation Address: 675 TEXAS STREET, SUITE 2500
Affiliation City: FAIRFIELD
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

H34 **SHELL CASE #2** **LUST** **S106567553**
SSE **1611 E. MONTE VISTA** **Cortese** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.384 mi.
2030 ft. **Site 5 of 5 in cluster H**

Relative:
Higher

Actual:
127 ft.

LUST REG 5:
Name: SHELL Case #2
Address: 1611 E. MONTE VISTA
City: VACAVILLE
Region: 5
Status: Pollution Characterization
Case Number: 480223
Case Type: Drinking Water Aquifer affected
Substance: Not reported
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: N/A

CORTESE:
Name: SHELL CASE #2
Address: 1611 E. MONTE VISTA
City,State,Zip: VACAVILLE, CA 95688
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609518478
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported

DRAFT

SHELL CASE #2 (Continued) **S106567553**

Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

I35 **K MART** **UST FINDER RELEASE** **1029007043**
South **130 BROWN VALLEY PKWY** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.407 mi.
2148 ft. **Site 1 of 2 in cluster I**

Relative: **Higher**
Actual: **131 ft.**

UST FINDER RELEASE:

Object ID:	45491
Facility ID:	Not reported
Lust ID:	CAT0609500387
Name:	K MART
Address:	130 BROWN VALLEY PKWY
City,State,Zip:	VACAVILLE, CA 95688
Address Match Type:	StreetAddress
Reported Date:	Not reported
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	69
Domestic Wells within 1500ft:	0
Land Use:	Developed, High Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	No
WHPA PWS Facility ID:	Not reported
WHPA Water Type:	Not reported
WHPA Facility Type:	Not reported
WHPA HUC12:	Not reported
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-121.96786
Y Coord:	38.36488
Latitude:	38.3648799999999
Longitude:	-121.96786

DRAFT

I36 **K MART** **LUST** **S105027172**
South **130 BROWN VALLEY PKWY** **Cortese** **N/A**
1/4-1/2 **VACAVILLE, CA 95688** **HIST CORTESE**
0.407 mi. **CERS**
2148 ft. **Site 2 of 2 in cluster I**

Relative:
Higher

Actual:
131 ft.

LUST:

Name:	K MART
Address:	130 BROWN VALLEY PKWY
City,State,Zip:	VACAVILLE, CA 95688
Lead Agency:	SOLANO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_repo rt.asp?global_id=T0609500387
Global Id:	T0609500387
Latitude:	38.3604995
Longitude:	-121.9772444
Status:	Completed - Case Closed
Status Date:	09/19/1995
Case Worker:	Not reported
RB Case Number:	480139
Local Agency:	SOLANO COUNTY
File Location:	Not reported
Local Case Number:	50071
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
EPA Region:	9
Coordinate Source:	Manual Entry on Screens
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	10/08/1990
Leak Reported Date:	11/19/1991
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	09/19/1995
CA Water Watershed Name:	Valley Putah-Cache - Elmira (511.10)
Dwr Groundwater Subbasin Name:	Sacramento Valley - Solano (5-021.66)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	36-40%
CA Enviroscreen 4 Score:	50-55%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	CENTRAL VALLEY RWQCB (REGION 5S)
Site History:	Not reported

LUST:

Global Id:	T0609500387
Contact Type:	Local Agency Caseworker
Contact Name:	SOLANO COUNTY
Organization Name:	SOLANO COUNTY
Address:	675 TEXAS STREET, SUITE 2500
City:	FAIRFIELD
Email:	Not reported
Phone Number:	Not reported

LUST:

DRAFT

K MART (Continued) **S105027172**

Global Id: T0609500387
Action Type: Other
Date: 10/08/1990
Action: Leak Discovery

Global Id: T0609500387
Action Type: Other
Date: 11/19/1991
Action: Leak Reported

Global Id: T0609500387
Action Type: Other
Date: 10/08/1990
Action: Leak Stopped

LUST:
Global Id: T0609500387
Status: Open - Case Begin Date
Status Date: 10/08/1990

Global Id: T0609500387
Status: Open - Site Assessment
Status Date: 01/04/1991

Global Id: T0609500387
Status: Completed - Case Closed
Status Date: 09/19/1995

LUST REG 5:
Name: K MART
Address: 130 BROWN VALLEY PKWY
City: VACAVILLE
Region: 5
Status: Case Closed
Case Number: 480139
Case Type: Soil only
Substance: WASTE OIL
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: N/A

CORTESE:
Name: K MART
Address: 130 BROWN VALLEY PKWY
City,State,Zip: VACAVILLE, CA 95688
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609500387
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported

DRAFT

K MART (Continued) **S105027172**

Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	K MART
edr_fadd1:	130 BROWN VALLEY PRKWAY
City,State,Zip:	VACAVILLE, CA
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	480139

CERS:

Name:	K MART
Address:	130 BROWN VALLEY PKWY
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	662847
CERS ID:	T0609500387
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

J37 **CHEVRON** **LUST** **S104493333**
SSE **1615 MONTE VISTA AVE E** **Cortese** **N/A**
1/4-1/2 **VACAVILLE, CA 95688** **HIST CORTESE**
0.412 mi. **CERS**
2174 ft. **Site 1 of 4 in cluster J**

Relative:
Lower

Actual:
121 ft.

LUST:

Name:	CHEVRON
Address:	1615 MONTE VISTA AVE E
City,State,Zip:	VACAVILLE, CA 95688
Lead Agency:	SOLANO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500353
Global Id:	T0609500353
Latitude:	38.366976556

DRAFT

CHEVRON (Continued) **S104493333**

Longitude:	-121.963367747
Status:	Completed - Case Closed
Status Date:	12/26/2017
Case Worker:	Not reported
RB Case Number:	480090
Local Agency:	SOLANO COUNTY
File Location:	Local Agency
Local Case Number:	50009
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Benzene, Gasoline
EPA Region:	9
Coordinate Source:	* Historical Geocode - Exact Address Match
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	10/14/1988
Leak Reported Date:	02/23/1989
How Discovered:	Other Means
How Discovered Description:	Not reported
Discharge Source:	Piping
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	12/26/2017
CA Water Watershed Name:	Valley Putah-Cache - Elmira (511.10)
Dwr Groundwater Subbasin Name:	Sacramento Valley - Solano (5-021.66)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	61-65%
CA Enviroscreen 4 Score:	55-60%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	CENTRAL VALLEY RWQCB (REGION 5S)
Site History:	May 16, 2011-CRA submitted First Quarter 2011 monitoring results. GW flow direction was westerly and gradient was 0.01, depth to water was from 9.9 to 11.3 feet. MW8 has TPH-gasoline (TPH-g) at 180,000 g/L, Benzene at 24,000 g/L and total xylenes at 23,000 g/L.TPH-diesel (TPH-d) was 4,800 g/L. TPH-g, TPH-d and BTEX contaminants have all increased from the previous monitoring event and the last sampling event has the highest benzene results ever monitored at the site. The CA Primary MCL for Benzene is 1.0 g/L and the California Public Health Goal (OEHHA) for Benzene is 0.15 g/L. March 1, 2011- CRA submitted 3rd QTR to SCDRM. Groundwater is to the N/NE, DTW for the 2 wells that were samples was 11.65-12.40 fbg. TPHd was found in MW 7 at 970 g/L & MW9 at 60 g/L. MW 8 was not included in this sampling and the last two sampling events from this well for Benzene was 6,300 g/L & 10,000 g/L, TPH GRO was at 46,000 & 72,000 in MW 8. MW 8 will be sampled for TPH GRO and Benzene in the first quarter. January 5, 2011- Letter sent by SCDRM to Chevron requesting additional information about the site. Chevron requested closure but has a monitoring well that has benzene at 10,000 g/L and could not provide a degradation calculation since the trend is increasing. The well is located approximately 20-30 feet from a water line that provides water to the city of Vacaville. August 3, 2011-CRA submitted 2nd Quarter 2011 quarterly monitoring report to SCDRM. DTW ranged from 10.83 to 11.95 feet below grade. MW8 had benzene at 20,000 g/L and TPHg at 100,000 g/L. The CA Primary MCL for Benzene is 1.0 g/L and the California Public Health Goal (OEHHA) for Benzene is 0.15 g/L.

DRAFT

CHEVRON (Continued) **S104493333**

LUST:
Global Id: T0609500353
Contact Type: Regional Board Caseworker
Contact Name: ALAN M. BUEHLER
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 Sun Center Dr
City: RANCHO CORDOVA
Email: alan.buehler@waterboards.ca.gov
Phone Number: 9164644615

Global Id: T0609500353
Contact Type: Local Agency Caseworker
Contact Name: SOLANO COUNTY
Organization Name: SOLANO COUNTY
Address: 675 TEXAS STREET, SUITE 2500
City: FAIRFIELD
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 11/27/2002
Action: * Historical Enforcement

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 10/14/2014
Action: Staff Letter

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 05/15/2012
Action: File review

Global Id: T0609500353
Action Type: Other
Date: 02/23/1989
Action: Leak Reported

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 01/07/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 11/27/2002
Action: Staff Letter

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 03/06/2008
Action: File review

Global Id: T0609500353

DRAFT

CHEVRON (Continued) **S104493333**

Action Type: ENFORCEMENT
Date: 05/16/2011
Action: File review

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 05/15/2014
Action: Staff Letter

Global Id: T0609500353
Action Type: Other
Date: 10/14/1988
Action: Leak Discovery

Global Id: T0609500353
Action Type: RESPONSE
Date: 05/06/2013
Action: Other Workplan - Regulator Responded

Global Id: T0609500353
Action Type: RESPONSE
Date: 08/13/2014
Action: Request for Closure - Regulator Responded

Global Id: T0609500353
Action Type: RESPONSE
Date: 11/08/2017
Action: Request for Closure - Regulator Responded

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 03/01/2011
Action: File review

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 06/26/2010
Action: File review

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 11/29/2016
Action: Staff Letter

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 08/21/2017
Action: Verbal Communication

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 01/22/2015
Action: LOP Case Closure Summary to RB

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 06/05/2008

DRAFT

CHEVRON (Continued) **S104493333**

Action: Technical Correspondence / Assistance / Other

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 07/15/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 08/06/2010
Action: Site Visit / Inspection / Sampling

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 01/05/2011
Action: File review

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 01/05/2011
Action: File review

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 10/20/2017
Action: Notification - Public Notice of Case Closure

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 01/22/2015
Action: LOP Case Closure Summary to RB

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 07/20/2017
Action: Email Correspondence

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 12/26/2017
Action: Closure/No Further Action Letter

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 05/27/2010
Action: File review

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 03/11/2015
Action: Staff Letter

Global Id: T0609500353
Action Type: ENFORCEMENT
Date: 07/17/2017
Action: File Review - Closure

DRAFT

CHEVRON (Continued) **S104493333**

Global Id: T0609500353
Action Type: RESPONSE
Date: 11/06/1991
Action: Tank Removal Report / UST Sampling Report

LUST:
Global Id: T0609500353
Status: Open - Case Begin Date
Status Date: 10/14/1988

Global Id: T0609500353
Status: Open - Site Assessment
Status Date: 03/21/1989

Global Id: T0609500353
Status: Open - Site Assessment
Status Date: 10/14/1991

Global Id: T0609500353
Status: Open - Site Assessment
Status Date: 11/27/2002

Global Id: T0609500353
Status: Open - Remediation
Status Date: 09/01/2004

Global Id: T0609500353
Status: Open - Site Assessment
Status Date: 07/11/2007

Global Id: T0609500353
Status: Open - Eligible for Closure
Status Date: 02/26/2015

Global Id: T0609500353
Status: Completed - Case Closed
Status Date: 12/26/2017

LUST REG 5:
Name: CHEVRON
Address: 1615 MONTE VISTA AVE E
City: VACAVILLE
Region: 5
Status: Remedial action (cleanup) Underway
Case Number: 480090
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: 3

CORTESE:
Name: CHEVRON
Address: 1615 MONTE VISTA AVE E

DRAFT

CHEVRON (Continued) **S104493333**

City,State,Zip:	VACAVILLE, CA 95688
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0609500353
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	CHEVRON
edr_fadd1:	1615 MONTE VISTA
City,State,Zip:	VACAVILLE, CA 95688
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	480090

CERS:

Name:	CHEVRON
Address:	1615 MONTE VISTA AVE E
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	643467
CERS ID:	T0609500353
CERS Description:	Leaking Underground Storage Tank Cleanup Site

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J38 **CHEVRON #1386** **LUST** **S103634048**
SSE **1615 E MONTE VISTA AVE** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.412 mi.
2174 ft. **Site 2 of 4 in cluster J**

Relative: **Lower**

Actual: **121 ft.**

SOLANO CO. LUST:

Name:	CHEVRON #1386
Address:	1615 E MONTE VISTA AVE
City,State,Zip:	VACAVILLE, CA 95688
Region:	SOLANO
Facility ID:	50009
Facility Status:	I
Facility Status Desc:	Inactive
Facility Phone:	707-448-0650
Program:	29S
Inventory Number:	1

DRAFT

CHEVRON #1386 (Continued) **S103634048**

Inventory Type: Aquifer Impact (112)
Inventory Description: Not reported
Last service/permit exp: ISSUANCE OF A CLOSURE DOCUMENT * Missing *
Last service date: 12/26/2017
District: SUP-DIST NO 3036
Inspector: Bernardo, Josuwa
Call Back: Not reported

J39 **CHEVRON** **Notify 65** **S100235929**
SSE **1615 EAST MONTE VISTA AVE** **N/A**
1/4-1/2 **VACAVILLE, CA 94303**
0.412 mi.
2174 ft. **Site 3 of 4 in cluster J**

Relative: **Lower**
Actual: **121 ft.**

NOTIFY 65:
Name: CHEVRON
Address: 1615 EAST MONTE VISTA AVE
City,State,Zip: VACAVILLE, CA 94303
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported
Global ID: Not reported
Status: Not reported

J40 **CHEVRON** **UST FINDER RELEASE** **1028935078**
SSE **1615 MONTE VISTA AVE E** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.412 mi.
2174 ft. **Site 4 of 4 in cluster J**

Relative: **Lower**
Actual: **121 ft.**

UST FINDER RELEASE:
Object ID: 45548
Facility ID: Not reported
Lust ID: CAT0609500353
Name: CHEVRON
Address: 1615 MONTE VISTA AVE E
City,State,Zip: VACAVILLE, CA 95688
Address Match Type: PointAddress
Reported Date: Not reported
Status: No Further Action
Substance: Not reported
Population within 1500ft: 5
Domestic Wells within 1500ft: 0
Land Use: Developed, Medium Intensity
Within SPA: No
SPA PWS Facility ID: Not reported
SPA Water Type: Not reported
SPA Facility Type: Not reported
SPA HUC12: Not reported
Within WHPA: No
WHPA PWS Facility ID: Not reported
WHPA Water Type: Not reported

DRAFT

CHEVRON (Continued) **1028935078**

WHPA Facility Type:	Not reported
WHPA HUC12:	Not reported
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-121.96363
Y Coord:	38.3666900000001
Latitude:	38.3666899999999
Longitude:	-121.963629999999

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41 **WABCO CALIF REPAIR CENTER** **RCRA-SQG** **1000175655**
NNE **4977 ALLISON PARKWAY** **CPS-SLIC** **CAD982503831**
1/4-1/2 **VACAVILLE, CA 95688**
0.415 mi.
2190 ft.

Relative:
Higher

Actual:
142 ft.

RCRA Listings:

Date Form Received by Agency:	19960901
Handler Name:	Wabco Calif Repair Center
Handler Address:	4977 ALLISON PARKWAY
Handler City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAD982503831
Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Ca
State District:	2
Mailing Address:	4977 ALLISON PARKWAY
Mailing City,State,Zip:	VACAVILLE, CA 95688
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	Not Required
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No

DRAFT

WABCO CALIF REPAIR CENTER (Continued) **1000175655**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20020627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	AMERICAN STANDARD
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported

DRAFT

WABCO CALIF REPAIR CENTER (Continued) **1000175655**

Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19960901
Handler Name: WABCO CALIF REPAIR CENTER
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ca
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900104
Handler Name: WABCO CALIF REPAIR CENTER
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ca
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 33651
NAICS Description: RAILROAD ROLLING STOCK MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

SLIC REG 5:
Name: WABCO, Vacaville
Address: 4977 Allison Parkway
City: Vacaville
Region: 5
Facility Status: Remediation Completed
Unit: Facility is a Spill or site
Pollutant: TPH
Lead Agency: Not reported
Date Filed: 04/25/91
Report Date: / /
Date Added: Not reported
Date Closed: Not reported

DRAFT

K42 **BP SERVICE STATION #02489** **LUST** **S101594993**
South **1491 E MONTE VISTA AVE** **CERS HAZ WASTE** **N/A**
1/4-1/2 **VACAVILLE, CA 95688** **SWEEPS UST**
0.484 mi. **HIST UST**
2554 ft. **Site 1 of 6 in cluster K** **CA FID UST**
EMI
Relative: **CERS**
Higher

Actual: **132 ft.**

SOLANO CO. LUST:

Name:	G&M OIL CO #200
Address:	1491 E MONTE VISTA AVE
City,State,Zip:	VACAVILLE, CA 95688
Region:	SOLANO
Facility ID:	50059
Facility Status:	I
Facility Status Desc:	Inactive
Facility Phone:	707-452-0173
Program:	29S
Inventory Number:	1
Inventory Type:	LOP - Closed Site (128)
Inventory Description:	Not reported
Last service/permit exp:	REVIEW REPORTS / POST REM MONIT * Missing *
Last service date:	07/10/2008
District:	SUP-DIST NO 3036
Inspector:	Bernardo, Josuwa
Call Back:	Not reported

CERS HAZ WASTE:

Name:	H&S ENERGY PRODUCTS, LLC #3052
Address:	1491 E MONTE VISTA AVE
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	22548
CERS ID:	10397332
CERS Description:	Hazardous Waste Generator

SWEEPS UST:

Name:	BP SERVICE STATION #02489
Address:	1491 E MONTE VISTA AVE
City:	VACAVILLE
Status:	Active
Comp Number:	50059
Number:	9
Board Of Equalization:	44-207706
Referral Date:	08-04-93
Action Date:	03-02-94
Created Date:	02-29-88
Owner Tank Id:	170-1
SWRCB Tank Id:	48-000-050059-000001
Tank Status:	A
Capacity:	12000
Active Date:	08-04-93
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	5

Name:	BP SERVICE STATION #02489
Address:	1491 E MONTE VISTA AVE

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

City:	VACAVILLE
Status:	Active
Comp Number:	50059
Number:	9
Board Of Equalization:	44-207706
Referral Date:	08-04-93
Action Date:	03-02-94
Created Date:	02-29-88
Owner Tank Id:	170-2
SWRCB Tank Id:	48-000-050059-000002
Tank Status:	A
Capacity:	5000
Active Date:	08-04-93
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	BP SERVICE STATION #02489
Address:	1491 E MONTE VISTA AVE
City:	VACAVILLE
Status:	Active
Comp Number:	50059
Number:	9
Board Of Equalization:	44-207706
Referral Date:	08-04-93
Action Date:	03-02-94
Created Date:	02-29-88
Owner Tank Id:	170-3
SWRCB Tank Id:	48-000-050059-000003
Tank Status:	A
Capacity:	8000
Active Date:	08-04-93
Tank Use:	M.V. FUEL
STG:	P
Content:	PRM UNLEADED
Number Of Tanks:	Not reported

Name:	BP SERVICE STATION #02489
Address:	1491 E MONTE VISTA AVE
City:	VACAVILLE
Status:	Active
Comp Number:	50059
Number:	9
Board Of Equalization:	44-207706
Referral Date:	08-04-93
Action Date:	03-02-94
Created Date:	02-29-88
Owner Tank Id:	170-7
SWRCB Tank Id:	48-000-050059-000004
Tank Status:	A
Capacity:	5000
Active Date:	08-04-93
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

Name:	BP SERVICE STATION #02489
Address:	1491 E MONTE VISTA AVE
City:	VACAVILLE
Status:	Active
Comp Number:	50059
Number:	9
Board Of Equalization:	44-207706
Referral Date:	08-04-93
Action Date:	03-02-94
Created Date:	02-29-88
Owner Tank Id:	170-10
SWRCB Tank Id:	48-000-050059-000005
Tank Status:	A
Capacity:	550
Active Date:	08-04-93
Tank Use:	OIL
STG:	W
Content:	WASTE OIL
Number Of Tanks:	Not reported

Name:	BP SERVICE STATION #02489
Address:	1491 E MONTE VISTA AVE
City:	VACAVILLE
Status:	Not reported
Comp Number:	50059
Number:	Not reported
Board Of Equalization:	44-207706
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-050059-000006
Tank Status:	Not reported
Capacity:	5000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	LEADED
Number Of Tanks:	1

HIST UST:

Name:	THRIFTY OIL STN 170
Address:	1491 E MONTE VISTA AVENUE
City,State,Zip:	VACAVILLE, CA 95688
File Number:	000213e8
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/000213e8.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	48000281
Regulated By:	UTNKA
Regulated ID:	00006169
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	2868 PROSPECT PEAK DR
Mailing Address 2:	Not reported
Mailing City,St,Zip:	VACAVILLE 95688
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

EMI:

Name:	H&S ENERGY PRODUCTS, LLC #3052
Address:	1491 EAST MONTE VISTA AVENUE
City,State,Zip:	VACAVILLE, CA 95688
Year:	2020
County Code:	48
Air Basin:	SV
Facility ID:	5065
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.0857142857
Reactive Organic Gases Tons/Yr:	0.96
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	H&S ENERGY PRODUCTS, LLC #3052
Address:	1491 EAST MONTE VISTA AVENUE
City,State,Zip:	VACAVILLE, CA 95688
Year:	2021
County Code:	48

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

Air Basin:	SV
Facility ID:	5065
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.0857142857
Reactive Organic Gases Tons/Yr:	0.96
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

CERS:

Name:	H&S ENERGY PRODUCTS, LLC #3052
Address:	1491 E MONTE VISTA AVE
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	22548
CERS ID:	10397332
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	22548
Site Name:	H&S Energy Products, LLC #3052
Violation Date:	02-21-2018
Citation:	HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description:	Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.
Violation Notes:	Returned to compliance on 09/26/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	22548
Site Name:	H&S Energy Products, LLC #3052
Violation Date:	09-22-2021
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 09/22/2021.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-21-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Solano County Environmental Health
Eval Program:	UST

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-23-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-14-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-22-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-22-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On Site for annual AMC, All UST Documentation available for review, no violations observed.
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-22-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On Site for Hazardous Waste Inspection, manifests available for review, no violations observed.
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-22-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On Site for HMBP Inspection. CERS up to date, no violations observed.
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-29-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-07-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No noted violations
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-19-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-19-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-29-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-07-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-21-2018
Violations Found: No

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-21-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-22-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-13-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-29-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-07-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: AMC done, records in place including DO, etc.
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-18-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-22-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-26-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-16-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No violations observed.
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Coordinates:
Site ID: 22548
Facility Name: H&S Energy Products, LLC #3052
Env Int Type Code: HWG
Program ID: 10397332
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 38.363830
Longitude: -121.967600

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Desiz Burns
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Christian Torres
Entity Title: Not reported
Affiliation Address: 2860 N. Santiago Blvd. - Suite 200
Affiliation City: Orange

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92867
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	H&S Energy, LLC
Entity Title:	Not reported
Affiliation Address:	2860 N. Santiago Blvd. - 2nd Floor
Affiliation City:	Orange
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92867
Affiliation Phone:	(714) 761-5426,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2860 N. Santiago Blvd. - Suite 200
Affiliation City:	Orange
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92867
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Desiz Burns
Entity Title:	Compliance Specialist
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Thrifty Oil Co.
Entity Title:	Not reported
Affiliation Address:	13116 Imperial Hwy
Affiliation City:	Santa Fe
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	90670
Affiliation Phone:	(562) 921-3581,
Affiliation Type Desc:	Legal Owner
Entity Name:	H&S Energy Products, LLC
Entity Title:	Not reported
Affiliation Address:	2860 N. Santiago Blvd. - Suite 200
Affiliation City:	Orange
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92867
Affiliation Phone:	(714) 761-5426,
Affiliation Type Desc:	UST Tank Operator
Entity Name:	H&S Energy Products,LLC

DRAFT

BP SERVICE STATION #02489 (Continued) **S101594993**

Entity Title:	Not reported
Affiliation Address:	2860 N. Santiago Blvd.
Affiliation City:	Orange
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92867
Affiliation Phone:	(714) 761-5426,
Affiliation Type Desc:	UST Tank Owner
Entity Name:	Thrifty Oil Co.
Entity Title:	Not reported
Affiliation Address:	13116 Imperial Hwy
Affiliation City:	Santa Fe
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	90670
Affiliation Phone:	(562) 921-3581,
Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,
Affiliation Type Desc:	Operator
Entity Name:	H&S Energy Products, LLC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(714) 761-5426,
Affiliation Type Desc:	Parent Corporation
Entity Name:	H&S Energy, LLC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	UST Permit Applicant
Entity Name:	SOLEDAD GERMAN for G&M OIL CO.
Entity Title:	COMPLIANCE ADMINISTATOR
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(714) 475-6375,

DRAFT

K43 **THRIFTY (BP)** **LUST** **S104493331**
South **1491 MONTE VISTA AVE E** **Cortese** **N/A**
1/4-1/2 **VACAVILLE, CA 95688** **HIST CORTESE**
0.484 mi. **CERS**
2554 ft. **Site 2 of 6 in cluster K**

Relative:
Higher

Actual:
132 ft.

LUST:

Name:	THRIFTY (BP)
Address:	1491 MONTE VISTA AVE E
City,State,Zip:	VACAVILLE, CA 95688
Lead Agency:	SOLANO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_repo rt.asp?global_id=T0609500389
Global Id:	T0609500389
Latitude:	38.363824
Longitude:	-121.967613
Status:	Completed - Case Closed
Status Date:	03/27/2001
Case Worker:	Not reported
RB Case Number:	480141
Local Agency:	SOLANO COUNTY
File Location:	Not reported
Local Case Number:	50059
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	06/26/1991
Leak Reported Date:	11/19/1991
How Discovered:	Other Means
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	03/27/2001
CA Water Watershed Name:	Valley Putah-Cache - Elmira (511.10)
Dwr Groundwater Subbasin Name:	Sacramento Valley - Solano (5-021.66)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	36-40%
CA Enviroscreen 4 Score:	50-55%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	CENTRAL VALLEY RWQCB (REGION 5S)
Site History:	Not reported

LUST:

Global Id:	T0609500389
Contact Type:	Local Agency Caseworker
Contact Name:	SOLANO COUNTY
Organization Name:	SOLANO COUNTY
Address:	675 TEXAS STREET, SUITE 2500
City:	FAIRFIELD
Email:	Not reported
Phone Number:	Not reported

LUST:

DRAFT

THRIFTY (BP) (Continued) **S104493331**

Global Id: T0609500389
Action Type: Other
Date: 06/26/1991
Action: Leak Discovery

Global Id: T0609500389
Action Type: Other
Date: 11/19/1991
Action: Leak Reported

Global Id: T0609500389
Action Type: ENFORCEMENT
Date: 03/17/2001
Action: Closure/No Further Action Letter

LUST:
Global Id: T0609500389
Status: Open - Case Begin Date
Status Date: 06/26/1991

Global Id: T0609500389
Status: Open - Site Assessment
Status Date: 08/07/1991

Global Id: T0609500389
Status: Open - Site Assessment
Status Date: 10/13/1993

Global Id: T0609500389
Status: Completed - Case Closed
Status Date: 03/27/2001

LUST REG 5:
Name: THRIFTY (BP)
Address: 1491 MONTE VISTA AVE E
City: VACAVILLE
Region: 5
Status: Case Closed
Case Number: 480141
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: 3

CORTESE:
Name: THRIFTY (BP)
Address: 1491 MONTE VISTA AVE E
City,State,Zip: VACAVILLE, CA 95688
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609500389
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED

DRAFT

THRIFTY (BP) (Continued) **S104493331**

Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	THRIFTY (BP)
edr_fadd1:	1491 MONTE VISTA
City,State,Zip:	VACAVILLE, CA 95688
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	480141

CERS:

Name:	THRIFTY (BP)
Address:	1491 MONTE VISTA AVE E
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	690453
CERS ID:	T0609500389
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

K44 **THRIFTY (BP)** **UST FINDER RELEASE** **1029117748**
South **1491 MONTE VISTA AVE E** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.484 mi.
2554 ft. **Site 3 of 6 in cluster K**

Relative:
Higher

Actual:
132 ft.

UST FINDER RELEASE:

Object ID:	45494
Facility ID:	Not reported
Lust ID:	CAT0609500389
Name:	THRIFTY (BP)

DRAFT

THRIFTY (BP) (Continued) **1029117748**

Address:	1491 MONTE VISTA AVE E
City,State,Zip:	VACAVILLE, CA 95688
Address Match Type:	PointAddress
Reported Date:	Not reported
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	70
Domestic Wells within 1500ft:	0
Land Use:	Developed, High Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	No
WHPA PWS Facility ID:	Not reported
WHPA Water Type:	Not reported
WHPA Facility Type:	Not reported
WHPA HUC12:	Not reported
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-121.96745
Y Coord:	38.36359
Latitude:	38.36359
Longitude:	-121.967449999999

K45 **BEACON, NUT TREE** **UST FINDER RELEASE** **1028923248**
South **1501 EAST MONTE VISTA AVENUE** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.485 mi.
2559 ft. **Site 4 of 6 in cluster K**

Relative: **Higher**

Actual: **131 ft.**

UST FINDER RELEASE:

Object ID:	45503
Facility ID:	Not reported
Lust ID:	CAT0609548562
Name:	BEACON, NUT TREE
Address:	1501 EAST MONTE VISTA AVENUE
City,State,Zip:	VACAVILLE, CA 95688
Address Match Type:	PointAddress
Reported Date:	Not reported
Status:	Open
Substance:	Not reported
Population within 1500ft:	40
Domestic Wells within 1500ft:	0
Land Use:	Developed, High Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported

DRAFT

BEACON, NUT TREE (Continued) **1028923248**

Within WHPA:	No
WHPA PWS Facility ID:	Not reported
WHPA Water Type:	Not reported
WHPA Facility Type:	Not reported
WHPA HUC12:	Not reported
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-121.96671
Y Coord:	38.36389
Latitude:	38.3638899999999
Longitude:	-121.96671

K46 **BEACON, NUT TREE** **LUST** **S106163876**
South **1501 EAST MONTE VISTA AVENUE** **N/A**
1/4-1/2 **VACAVILLE, CA 95688**
0.485 mi.
2559 ft. **Site 5 of 6 in cluster K**

Relative:
Higher

Actual:
131 ft.

LUST REG 5:

Name:	BEACON, NUT TREE
Address:	1501 EAST MONTE VISTA AVENUE
City:	VACAVILLE
Region:	5
Status:	Remedial action (cleanup) Underway
Case Number:	480224
Case Type:	Drinking Water Aquifer affected
Substance:	Not reported
Staff Initials:	JIM
Lead Agency:	Local
Program:	LUST
MTBE Code:	N/A

K47 **BEACON NUT TREE STATION** **LUST** **S101594997**
South **1501 EAST MONTE VISTA AVENUE** **CERS HAZ WASTE** **N/A**
1/4-1/2 **VACAVILLE, CA 95688** **SWEEPS UST**
0.485 mi. **CERS TANKS**
2559 ft. **Site 6 of 6 in cluster K** **CA FID UST**
Cortese

Relative:
Higher

EMI
HIST CORTESE

Actual:
131 ft.

HWTS
HAZNET
CERS

SOLANO CO. LUST:

Name:	ALPINE PETROLEUM INC / VALERO
Address:	1501 E MONTE VISTA AVE
City,State,Zip:	VACAVILLE, CA 95688
Region:	SOLANO

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Facility ID: 50082
Facility Status: I
Facility Status Desc: Inactive
Facility Phone: 707-450-0875
Program: 29S
Inventory Number: 1
Inventory Type: DTSC / RB Lead (129)
Inventory Description: RWQCB Lead
Last service/permit exp: REVIEW REPORTS / POST REM MONIT 04/30/93
Last service date: 06/17/2011
District: SUP-DIST NO 3036
Inspector: Bernardo, Josuwa
Call Back: Not reported

LUST:
Name: BEACON NUT TREE STATION
Address: 1501 EAST MONTE VISTA AVENUE
City,State,Zip: VACAVILLE, CA 95688
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609548562
Global Id: T0609548562
Latitude: 38.3640544003374
Longitude: -121.966770805471
Status: Open - Site Assessment
Status Date: 11/18/2014
Case Worker: AMB
RB Case Number: 480224
Local Agency: SOLANO COUNTY
File Location: Regional Board
Local Case Number: 50082
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Benzene, Diesel, Ethylbenzene, Gasoline, Heating Oil / Fuel Oil, MTBE / TBA / Other Fuel Oxygenates, Naphthalene, Toluene, Xylene
EPA Region: 9
Coordinate Source: Google Map Move
Cuf Case: YES
Quantity Released Gallons: Not reported
Begin Date: 11/01/1990
Leak Reported Date: 01/08/1992
How Discovered: Site Assessment/Site Investigation
How Discovered Description: PHASE I ENVIRONMENTAL SITE ASSESSMENT WAS COMPLETED ON BEHALF OF THE SITE' THEN OWNER, HENRY OBERMULLER.REVIEW OF TANK INVENTORY RECORDS AND TANK INTEGRITY TESTING DATA SUGGESTS THAT CONTAMINATION WAS THE RESULF OF OVERFILLING AND SPILLAGE.
Discharge Source: Dispenser
Discharge Cause: Unknown
Stop Method: Close and Remove Tank
Stop Description: THREE 10,000 GALLON GASOLINE TANKS AND ONE 12,000 GALLON DIESEL TANK WERE REMOVED OCTOBER 31, 1995. THE WASTE OIL UST (550 GALLONS) WAS FILLED IN WITH CONCRETE.
No Further Action Date: Not reported
CA Water Watershed Name: Valley Putah-Cache - Elmira (511.10)
Dwr Groundwater Subbasin Name: Sacramento Valley - Solano (5-021.66)
Disadvantaged Community: Disadvantaged Community
CA Enviroscreen 3 Score: 46-50%
CA Enviroscreen 4 Score: 50-55%

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Military DOD Site: No
Facility Project Subtype: Not reported
RWQCB Region: CENTRAL VALLEY RWQCB (REGION 5S)
Site History: The case was opened following an unauthorized release from an underground storage tank system at the subject site. Corrective action is underway as directed by the CVRWQCB. Corrective action may consist of preliminary site investigation, planning and implementation of remedial action, verification monitoring, or a combination thereof. A summary of the site history is available by clicking on either the "Cleanup Status History", "Regulatory Activities" or the "Site Maps/Documents" tab. For a complete site history the case file at the CVRWQCB should be consulted.

LUST:
Global Id: T0609548562
Contact Type: Regional Board Caseworker - Primary Caseworker
Contact Name: ALAN M. BUEHLER
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 Sun Center Dr
City: RANCHO CORDOVA
Email: alan.buehler@waterboards.ca.gov
Phone Number: 9164644615

Global Id: T0609548562
Contact Type: Local Agency Caseworker
Contact Name: SOLANO COUNTY
Organization Name: SOLANO COUNTY
Address: 675 TEXAS STREET, SUITE 2500
City: FAIRFIELD
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 07/26/2005
Action: File review

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 05/06/2010
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 05/20/2010
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 11/05/2012
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 05/29/2013
Action: Meeting

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 02/01/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 11/18/2014
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 02/27/2014
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 05/25/2016
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 08/11/2022
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 04/06/2022
Action: Staff Letter

Global Id: T0609548562
Action Type: Other
Date: 11/01/1990
Action: Leak Discovery

Global Id: T0609548562
Action Type: Other
Date: 01/08/1992
Action: Leak Reported

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 09/04/2007
Action: File review

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 12/14/2011
Action: Clean-up and Abatement Order - #R5-2011-0711

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 11/17/2016
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Date: 02/23/2017
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 04/22/2019
Action: Other Report

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 04/05/2019
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 04/09/2020
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 04/08/2021
Action: Staff Letter

Global Id: T0609548562
Action Type: RESPONSE
Date: 10/28/2016
Action: Soil and Water Investigation Workplan

Global Id: T0609548562
Action Type: RESPONSE
Date: 04/30/2013
Action: Remedial Progress Report - Regulator Responded

Global Id: T0609548562
Action Type: RESPONSE
Date: 10/30/2013
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0609548562
Action Type: RESPONSE
Date: 03/12/2013
Action: Other Workplan - Regulator Responded

Global Id: T0609548562
Action Type: RESPONSE
Date: 12/15/2014
Action: Verbal Communication - Regulator Responded

Global Id: T0609548562
Action Type: RESPONSE
Date: 04/20/2016
Action: Corrective Action Plan / Remedial Action Plan - Regulator Responded

Global Id: T0609548562
Action Type: RESPONSE
Date: 10/28/2016
Action: Other Workplan - Regulator Responded

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Global Id:	T0609548562
Action Type:	RESPONSE
Date:	01/29/2017
Action:	Soil and Water Investigation Workplan - Addendum - Regulator Responded
Global Id:	T0609548562
Action Type:	REMEDIATION
Date:	06/18/2004
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0609548562
Action Type:	ENFORCEMENT
Date:	06/18/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0609548562
Action Type:	ENFORCEMENT
Date:	08/17/2005
Action:	Site Visit / Inspection / Sampling
Global Id:	T0609548562
Action Type:	ENFORCEMENT
Date:	04/22/2009
Action:	File review
Global Id:	T0609548562
Action Type:	ENFORCEMENT
Date:	07/08/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0609548562
Action Type:	ENFORCEMENT
Date:	08/25/2023
Action:	Staff Letter
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	12/30/2010
Action:	Site Assessment Report
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	02/23/2000
Action:	Site Assessment Report
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	03/22/2005
Action:	Well Installation Report
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	02/23/2004
Action:	Monitoring Report - Other
Global Id:	T0609548562
Action Type:	ENFORCEMENT

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Date: 06/23/2005
Action: File review

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 05/06/2005
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 05/05/2005
Action: File review

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 11/16/2005
Action: Site Visit / Inspection / Sampling

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 09/01/2011
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 07/26/2010
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 08/22/2011
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 10/10/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 06/17/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 11/03/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 06/16/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 07/30/2012
Action: Technical Correspondence / Assistance / Other

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Global Id:	T0609548562
Action Type:	ENFORCEMENT
Date:	11/01/2017
Action:	Staff Letter
Global Id:	T0609548562
Action Type:	ENFORCEMENT
Date:	12/28/2011
Action:	Clean Up Fund - Case Closure Review Summary Report (RSR)
Global Id:	T0609548562
Action Type:	ENFORCEMENT
Date:	02/05/2016
Action:	Clean Up Fund - Case Closure Review Summary Report (RSR)
Global Id:	T0609548562
Action Type:	ENFORCEMENT
Date:	12/22/2022
Action:	Staff Letter
Global Id:	T0609548562
Action Type:	Other
Date:	10/31/1995
Action:	Leak Stopped
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	07/30/2010
Action:	Other Report / Document
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	10/30/2010
Action:	Monitoring Report - Quarterly
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	07/23/2010
Action:	Soil and Water Investigation Workplan
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	08/30/2015
Action:	Tank Removal Report / UST Sampling Report
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	08/30/2015
Action:	Preliminary Site Assessment Report
Global Id:	T0609548562
Action Type:	RESPONSE
Date:	01/30/2016
Action:	Monitoring Report - Semi-Annually
Global Id:	T0609548562
Action Type:	RESPONSE

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Date: 01/03/2001
Action: Sensitive Receptor Survey Report

Global Id: T0609548562
Action Type: RESPONSE
Date: 06/26/2001
Action: Well Installation Report

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 11/16/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 11/08/2010
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 05/19/2010
Action: Meeting

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 05/18/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 05/24/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 06/21/2012
Action: Meeting

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 03/14/2013
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 07/10/2012
Action: Staff Letter

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 07/10/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 06/03/2019
Action: Staff Letter

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 06/11/2019
Action: Other Report

Global Id: T0609548562
Action Type: ENFORCEMENT
Date: 06/28/2019
Action: Staff Letter

Global Id: T0609548562
Action Type: RESPONSE
Date: 01/30/2012
Action: Monitoring Report - Quarterly

Global Id: T0609548562
Action Type: RESPONSE
Date: 08/24/2012
Action: Other Report / Document

Global Id: T0609548562
Action Type: RESPONSE
Date: 12/14/2012
Action: Other Report / Document

Global Id: T0609548562
Action Type: RESPONSE
Date: 04/30/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0609548562
Action Type: RESPONSE
Date: 02/28/2014
Action: Correspondence

Global Id: T0609548562
Action Type: RESPONSE
Date: 06/22/1993
Action: Unauthorized Release Form

Global Id: T0609548562
Action Type: RESPONSE
Date: 04/30/2015
Action: Monitoring Report - Other

Global Id: T0609548562
Action Type: RESPONSE
Date: 01/13/2017
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0609548562
Action Type: RESPONSE
Date: 01/30/2014
Action: Monitoring Report - Semi-Annually

LUST:
Global Id: T0609548562

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Status: Open - Case Begin Date
Status Date: 11/01/1990

Global Id: T0609548562
Status: Open - Remediation
Status Date: 11/01/2003

Global Id: T0609548562
Status: Open - Site Assessment
Status Date: 11/01/2003

Global Id: T0609548562
Status: Open - Remediation
Status Date: 10/01/2005

Global Id: T0609548562
Status: Open - Site Assessment
Status Date: 10/01/2011

Global Id: T0609548562
Status: Open - Remediation
Status Date: 03/14/2013

Global Id: T0609548562
Status: Open - Site Assessment
Status Date: 11/18/2014

CERS HAZ WASTE:
Name: VACAVILLE CHEVRON
Address: 1501 E MONTE VISTA AVE
City,State,Zip: VACAVILLE, CA 95688
Site ID: 384691
CERS ID: 10614391
CERS Description: Hazardous Waste Generator

SWEEPS UST:
Name: MONTE VISTA BEACON
Address: 1501 E MONTE VISTA AVE
City: VACAVILLE
Status: Active
Comp Number: 50082
Number: 9
Board Of Equalization: Not reported
Referral Date: 10-22-92
Action Date: 03-25-94
Created Date: 04-27-92
Owner Tank Id: Not reported
SWRCB Tank Id: 48-000-050082-000001
Tank Status: A
Capacity: 12000
Active Date: 04-27-92
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 5

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Name:	MONTE VISTA BEACON
Address:	1501 E MONTE VISTA AVE
City:	VACAVILLE
Status:	Active
Comp Number:	50082
Number:	9
Board Of Equalization:	Not reported
Referral Date:	10-22-92
Action Date:	03-25-94
Created Date:	04-27-92
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-050082-000002
Tank Status:	A
Capacity:	10000
Active Date:	04-27-92
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

Name:	MONTE VISTA BEACON
Address:	1501 E MONTE VISTA AVE
City:	VACAVILLE
Status:	Active
Comp Number:	50082
Number:	9
Board Of Equalization:	Not reported
Referral Date:	10-22-92
Action Date:	03-25-94
Created Date:	04-27-92
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-050082-000003
Tank Status:	A
Capacity:	10000
Active Date:	04-27-92
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	MONTE VISTA BEACON
Address:	1501 E MONTE VISTA AVE
City:	VACAVILLE
Status:	Active
Comp Number:	50082
Number:	9
Board Of Equalization:	Not reported
Referral Date:	10-22-92
Action Date:	03-25-94
Created Date:	04-27-92
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-050082-000004
Tank Status:	A
Capacity:	10000
Active Date:	04-27-92
Tank Use:	M.V. FUEL
STG:	P

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Content: REG UNLEADED
Number Of Tanks: Not reported

Name: MONTE VISTA BEACON
Address: 1501 E MONTE VISTA AVE
City: VACAVILLE
Status: Active
Comp Number: 50082
Number: 9
Board Of Equalization: Not reported
Referral Date: 10-22-92
Action Date: 03-25-94
Created Date: 04-27-92
Owner Tank Id: Not reported
SWRCB Tank Id: 48-000-050082-000005
Tank Status: A
Capacity: 550
Active Date: 04-27-92
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

CERS TANKS:
Name: VACAVILLE CHEVRON
Address: 1501 E MONTE VISTA AVE
City,State,Zip: VACAVILLE, CA 95688
Site ID: 384691
CERS ID: 10614391
CERS Description: Underground Storage Tank

CA FID UST:
Facility ID: 48000286
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7074471483
Mail To: Not reported
Mailing Address: P.O. BOX 1161
Mailing Address 2: Not reported
Mailing City,St,Zip: VACAVILLE 95688
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CORTESE:
Name: BEACON NUT TREE STATION
Address: 1501 EAST MONTE VISTA AVENUE
City,State,Zip: VACAVILLE, CA 95688
Region: CORTESE
Envirostor Id: Not reported

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BEACON NUT TREE STATION (Continued) **S101594997**

Global ID:	T0609548562
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	OPEN - SITE ASSESSMENT
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

EMI:

Name:	ALPINE PETROLEUM INC
Address:	1501 EAST MONTE VISTA AVENUE
City,State,Zip:	VACAVILLE, CA 95688
Year:	2014
County Code:	48
Air Basin:	SV
Facility ID:	5039
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO/SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.41
Reactive Organic Gases Tons/Yr:	1.41
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	ALPINE PETROLEUM INC
Address:	1501 EAST MONTE VISTA AVENUE
City,State,Zip:	VACAVILLE, CA 95688
Year:	2015
County Code:	48
Air Basin:	SV
Facility ID:	5039
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO/SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.41
Reactive Organic Gases Tons/Yr:	1.41
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: ALPINE PETROLEUM INC
Address: 1501 EAST MONTE VISTA AVENUE
City,State,Zip: VACAVILLE, CA 95688
Year: 2016
County Code: 48
Air Basin: SV
Facility ID: 5039
Air District Name: YS
SIC Code: 5541
Air District Name: YOLO-SOLANO AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.41
Reactive Organic Gases Tons/Yr: 1.41
Carbon Monoxide Emissions Tons/Yr: Not reported
NOX - Oxides of Nitrogen Tons/Yr: Not reported
SOX - Oxides of Sulphur Tons/Yr: Not reported
Particulate Matter Tons/Yr: Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr: Not reported

Name: ALPINE PETROLEUM INC
Address: 1501 EAST MONTE VISTA AVENUE
City,State,Zip: VACAVILLE, CA 95688
Year: 2017
County Code: 48
Air Basin: SV
Facility ID: 5039
Air District Name: YS
SIC Code: 5541
Air District Name: YOLO-SOLANO AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.36
Reactive Organic Gases Tons/Yr: 1.36
Carbon Monoxide Emissions Tons/Yr: Not reported
NOX - Oxides of Nitrogen Tons/Yr: Not reported
SOX - Oxides of Sulphur Tons/Yr: Not reported
Particulate Matter Tons/Yr: Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr: Not reported

Name: ALPINE PETROLEUM INC
Address: 1501 EAST MONTE VISTA AVENUE
City,State,Zip: VACAVILLE, CA 95688
Year: 2018
County Code: 48
Air Basin: SV
Facility ID: 5039
Air District Name: YS
SIC Code: 5541
Air District Name: YOLO-SOLANO AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.28

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BEACON NUT TREE STATION (Continued) **S101594997**

Reactive Organic Gases Tons/Yr:	1.28
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	SALKHI PETROLEUM INC
Address:	1501 EAST MONTE VISTA AVENUE
City,State,Zip:	VACAVILLE, CA 95688
Year:	2019
County Code:	48
Air Basin:	SV
Facility ID:	5039
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.12
Reactive Organic Gases Tons/Yr:	1.12
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	SALKHI PETROLEUM INC
Address:	1501 EAST MONTE VISTA AVENUE
City,State,Zip:	VACAVILLE, CA 95688
Year:	2020
County Code:	48
Air Basin:	SV
Facility ID:	5039
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.43
Reactive Organic Gases Tons/Yr:	0.43
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	SALKHI PETROLEUM INC
Address:	1501 EAST MONTE VISTA AVENUE
City,State,Zip:	VACAVILLE, CA 95688
Year:	2021
County Code:	48
Air Basin:	SV
Facility ID:	5039
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO-SOLANO AQMD

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BEACON NUT TREE STATION (Continued) **S101594997**

Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.43
Reactive Organic Gases Tons/Yr:	0.43
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

HIST CORTESE:

edr_fname:	MONTE VISTA BEACON
edr_fadd1:	1501 MONTE VISTA
City,State,Zip:	VACAVILLE, CA 95688
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	480153

HWTS:

Name:	ALPINE PETROLEUM INC
Address:	1501 E MONTE VISTA AVE
Address 2:	Not reported
City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAL000403897
Inactive Date:	06/30/2020
Create Date:	01/21/2015
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	1501 E MONTE VISTA AVE
Mailing Address 2:	Not reported
Mailing City,State,Zip:	VACAVILLE, CA 95688
Owner Name:	ALPINE PETROLEUM INC
Owner Address:	1501 E MONTE VISTA AVE
Owner Address 2:	Not reported
Owner City,State,Zip:	VACAVILLE, CA 95688
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	TEREK NAWARD
Contact Address:	1501 E MONTE VISTA AVE
Contact Address 2:	Not reported
City,State,Zip:	VACAVILLE, CA 95688
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	38.364219
Longitude:	-121.966848

NAICS:

EPA ID:	CAL000403897
Create Date:	2015-01-21 11:37:09.937
NAICS Code:	44719
NAICS Description:	Other Gasoline Stations
Issued EPA ID Date:	2015-01-21 11:37:09.91700
Inactive Date:	2020-06-30 00:00:00

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BEACON NUT TREE STATION (Continued) **S101594997**

Facility Name: ALPINE PETROLEUM INC
Facility Address: 1501 E MONTE VISTA AVE
Facility Address 2: Not reported
Facility City: VACAVILLE
Facility County: Not reported
Facility State: CA
Facility Zip: 95688

HAZNET:
Name: ALPINE PETROLEUM INC
Address: 1501 E MONTE VISTA AVE
Address 2: Not reported
City,State,Zip: VACAVILLE, CA 95688
Contact: TEREK NAWARD
Telephone: 7074500875
Mailing Name: Not reported
Mailing Address: 1501 E MONTE VISTA AVE

Year: 2017
Gepaid: CAL000403897
TSD EPA ID: CAD059494310
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.1125

Year: 2017
Gepaid: CAL000403897
TSD EPA ID: CAT080013352
CA Waste Code: 343 - Unspecified organic liquid mixture
Disposal Method: H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.051

Year: 2015
Gepaid: CAL000403897
TSD EPA ID: CAD059494310
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.15

Year: 2015
Gepaid: CAL000403897
TSD EPA ID: CAT080013352
CA Waste Code: 343 - Unspecified organic liquid mixture
Disposal Method: H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.0136

Additional Info:
Year: 2017
Gen EPA ID: CAL000403897

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BEACON NUT TREE STATION (Continued) **S101594997**

Shipment Date:	20171006
Creation Date:	6/27/2018 18:30:19
Receipt Date:	20171019
Manifest ID:	016710649JJK
Trans EPA ID:	CAR000171017
Trans Name:	FREMOUW ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D018
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1125
Waste Quantity:	225
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20171006
Creation Date:	6/20/2018 18:31:46
Receipt Date:	20171020
Manifest ID:	016710648JJK
Trans EPA ID:	CAR000171017
Trans Name:	FREMOUW ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID:	CAD028277036
Trans 2 Name:	ASBURY ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO/KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D018
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.051
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000403897

Shipment Date:	20151020
Creation Date:	1/11/2016 22:16:49
Receipt Date:	20151027

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BEACON NUT TREE STATION (Continued) **S101594997**

Manifest ID:	014520702JJK
Trans EPA ID:	CAR000171017
Trans Name:	FREMOUW ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D018
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.15
Waste Quantity:	300
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20151020
Creation Date:	1/11/2016 22:16:40
Receipt Date:	20151102
Manifest ID:	014520701JJK
Trans EPA ID:	CAR000171017
Trans Name:	FREMOUW ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID:	CAD028277036
Trans 2 Name:	ASBURY ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO/KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D018
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.0136
Waste Quantity:	4
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	VACAVILLE CHEVRON
Address:	1501 E MONTE VISTA AVE
City,State,Zip:	VACAVILLE, CA 95688
Site ID:	384691
CERS ID:	10614391
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	384691

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BEACON NUT TREE STATION (Continued) **S101594997**

Site Name:	Vacaville Chevron
Violation Date:	12-21-2016
Citation:	23 CCR 16 2712 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712
Violation Description:	Failure to comply with any of the applicable requirements of the permit issued for the operation of the UST system.
Violation Notes:	Returned to compliance on 02/21/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	12-21-2016
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 02/21/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	11-15-2018
Citation:	23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description:	Failure to have current UST Monitoring Plan available on site.
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	10-29-2013
Citation:	HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description:	Failure to operate the UST system to prevent spills and/or overfills.
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	11-15-2018
Citation:	HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description:	Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

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BEACON NUT TREE STATION (Continued) **S101594997**

Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	11-15-2018
Citation:	23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(f)
Violation Description:	Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	11-15-2018
Citation:	23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(F)
Violation Description:	"Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter. Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician. Maintain records of secondary containment testing for 36 months."
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	10-14-2014
Citation:	HSC 6.11 25404(e)(4) - California Health and Safety Code, Chapter 6.11, Section(s) 25404(e)(4)
Violation Description:	Failure to report program data electronically.
Violation Notes:	Returned to compliance on 10/13/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	10-20-2017
Citation:	23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)
Violation Description:	Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC)

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BEACON NUT TREE STATION (Continued) **S101594997**

	and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been properly trained.
Violation Notes:	Returned to compliance on 02/21/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	12-22-2016
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 10/20/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	12-22-2016
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 01/20/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	10-29-2013
Citation:	23 CCR 16 2666 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2666
Violation Description:	Failure of the leak detection equipment to have an audible and visual alarm as required.
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	384691
Site Name:	Vacaville Chevron
Violation Date:	11-15-2018
Citation:	HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Description:	Failure to obtain a valid permit to operate from the UPA including but not limited to unpaid permit fees.

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BEACON NUT TREE STATION (Continued) **S101594997**

Violation Notes: Not reported
Violation Division: Solano County Environmental Health
Violation Program: UST
Violation Source: CERS,

Site ID: 384691
Site Name: Vacaville Chevron
Violation Date: 12-21-2016
Citation: 23 CCR 16 2630(d), 2643(f), 2644.1(a)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2630(d), 2643(f), 2644.1(a)(2)
Violation Description: Failure to demonstrate to the CUPA that the equipment and methods used to monitor the UST system are certified by an independent third-party as complying with the standards set forth in 23 CCR 2643(f).
Violation Notes: Returned to compliance on 02/21/2018.
Violation Division: Solano County Environmental Health
Violation Program: UST
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-14-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-20-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-31-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On Site for HMBP inspection. CERS is up to date, no violations observed.
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-21-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

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BEACON NUT TREE STATION (Continued) **S101594997**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-24-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-31-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On Site for Haz Waste Inspection. Waste Manifest available for review, no violations observed.
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-22-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-29-2013
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-31-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On Site for AMC, All UST documentation available for review, no Violations observed.
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-23-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Eval Date: 10-14-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-20-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-28-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No violations observed.
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-31-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-15-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-22-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-22-2016
Violations Found: Yes
Eval Type: Routine done by local agency

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Coordinates:
Site ID: 384691
Facility Name: Vacaville Chevron
Env Int Type Code: HMBP
Program ID: 10614391
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 38.364160
Longitude: -121.966900

Affiliation:
Affiliation Type Desc: Legal Owner
Entity Name: Salkhi Petroleum, Inc
Entity Title: Not reported
Affiliation Address: PO BOX 1678
Affiliation City: San Leandro
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 94577
Affiliation Phone: (415) 710-4004,

Affiliation Type Desc: Operator
Entity Name: Salkhi Petroleum, Inc
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (415) 710-4004,

Affiliation Type Desc: UST Tank Owner
Entity Name: Salkhi Petroleum, Inc
Entity Title: Not reported
Affiliation Address: PO BOX 1678
Affiliation City: San Leandro
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 94577
Affiliation Phone: (415) 710-4004,

Affiliation Type Desc: Document Preparer
Entity Name: Stantec Consulting Services Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Affiliation Type Desc:	Identification Signer
Entity Name:	Arash Salkhi
Entity Title:	President
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	SALKHI PETROLEUM
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	UST Permit Applicant
Entity Name:	NAMATH KANDHARI
Entity Title:	MANAGER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 718-1967,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Catherine Riccomini
Entity Title:	Not reported
Affiliation Address:	PO BOX 1678
Affiliation City:	San Leandro
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94577
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	PO BOX 1678
Affiliation City:	San Leandro
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94577
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	NAMATH KANDHARI
Entity Title:	Not reported
Affiliation Address:	1501 E. MONTE VISTA AVE
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	United States

DRAFT

BEACON NUT TREE STATION (Continued) **S101594997**

Affiliation Zip: 95688
Affiliation Phone: (415) 710-4004,

Affiliation Type Desc: UST Tank Operator
Entity Name: Salkhi Petroleum, Inc
Entity Title: Not reported
Affiliation Address: PO BOX 1678
Affiliation City: San Leandro
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 94577
Affiliation Phone: (415) 710-4004,

Affiliation Type Desc: CUPA District
Entity Name: Solano County Env Health
Entity Title: Not reported
Affiliation Address: 675 Texas Street, Suite 5500
Affiliation City: Fairfield
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94533
Affiliation Phone: (707) 784-6765,

Affiliation Type Desc: UST Property Owner Name
Entity Name: Salkhi Petroleum, Inc
Entity Title: Not reported
Affiliation Address: PO BOX 1678
Affiliation City: San Leandro
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 94577
Affiliation Phone: (415) 710-4004,

Name: BEACON NUT TREE STATION
Address: 1501 EAST MONTE VISTA AVENUE
City,State,Zip: VACAVILLE, CA 95688
Site ID: 637376
CERS ID: T0609548562
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: ALAN M. BUEHLER - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title: Not reported
Affiliation Address: 11020 Sun Center Dr
Affiliation City: RANCHO CORDOVA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9164644615,

DRAFT

48
South
1/2-1
0.538 mi.
2840 ft.

KNOWN
1330 CALLEN STREET
VACAVILLE, CA 94303

Notify 65 **S100178964**
N/A

Relative:
Higher

Actual:
173 ft.

NOTIFY 65:

Name:	KNOWN
Address:	1330 CALLEN STREET
City,State,Zip:	VACAVILLE, CA 94303
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

49
NNW
1/2-1
0.892 mi.
4712 ft.

ELEMENTARY SCHOOL 2CD
6975 BROWNS VALLEY ROAD
VACAVILLE, CA 95687

ENVIROSTOR SCH **S108757284**
N/A

Relative:
Higher

Actual:
160 ft.

ENVIROSTOR:

Name:	ELEMENTARY SCHOOL 2CD
Address:	6975 BROWNS VALLEY ROAD
City,State,Zip:	VACAVILLE, CA 95687
Facility ID:	48010003
Status:	Certified
Status Date:	10/12/2007
Site Code:	104427
Site Type:	School Cleanup
Site Type Detailed:	School
Acres:	20.6
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	* Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Assembly:	11
Senate:	03
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	38.39820
Longitude:	-121.9784
APN:	049-190-11
Past Use:	AGRICULTURAL - ROW CROPS, RESIDENTIAL AREA
Potential COC:	Chlordane DDD DDE DDT Dieldrin Heptachlor epoxide
Confirmed COC:	Dieldrin Heptachlor epoxide Chlordane DDD DDE DDT
Potential Description:	SOIL
Alias Name:	VACAVILLE USD-PROPOSED ES 2CD
Alias Type:	Alternate Name
Alias Name:	049-190-11
Alias Type:	APN

DRAFT

ELEMENTARY SCHOOL 2CD (Continued) **S108757284**

Alias Name: 110033616228
Alias Type: EPA (FRS #)
Alias Name: 104427
Alias Type: Project Code (Site Code)
Alias Name: 48010003
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 12/11/2006
Comments: DTSC reviewed and approved the workplan for additional OCP sampling.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 05/11/2007
Comments: This report will come under the cover of the Completion Report and reviewed at that time.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 10/12/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/25/2007
Comments: DTSC received notice from the Department of Resource Management that a UST was removed from the site on 5/4/07 and that no further action for this item is necessary.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 06/14/2007
Comments: DTSC reviewed samples collected for fill material and approved material for site usage.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 11/08/2005
Comments: DTSC issued a conditional approval which served as the comment letter and an approval letter. Sampling is anticipated to occur December 5th or 6th.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 08/03/2005
Comments: DTSC approved the PEA with a further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DRAFT

ELEMENTARY SCHOOL 2CD (Continued) **S108757284**

Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 12/20/2004
Comments: DTSC approved the PEA workplan for implementation

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 06/09/2006
Comments: DTSC approved the SSI Summary Report with a further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 03/22/2006
Comments: Approved the submittal dated 3/16/06 received 3/20/06 for stepout sampling to characterize chlordane at the site. Currents step-outs are up to 30 feet away from the structure. Maximun detection of chlordane found in the results of the second was 93,000 ug/kg (93 mg/kg- CHHSL is 0.43 mg/kg)

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 02/10/2006
Comments: Accepted the workplan for the additional step outs at the site to characterized the chlordane. First of the techmemos and second set of step samples for project. Chlordane is the COC. The maximum detection of chlordane was 30,000 ug/kg.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 11/07/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 09/19/2006
Comments: Fact Sheet was approved by Public Participation and ready for distribution to announce the start of the public comment period.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 09/29/2006
Comments: DTSC has reviewed and approved the Community Profile.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 03/25/2008
Comments: Cost recovery initiated and project closed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DRAFT

ELEMENTARY SCHOOL 2CD (Continued) **S108757284**

Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 12/07/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 08/25/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 06/12/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 11/08/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 11/02/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/19/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 09/27/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/19/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/28/2007
Comments: DTSC certifies that the removal of soil contaminated with organochlorine pesticides has been completed. Certification package was developed, reviewed, signed and placed into folder and on database.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DRAFT

ELEMENTARY SCHOOL 2CD (Continued) **S108757284**

Completed Document Type:	School Cleanup Agreement
Completed Date:	08/19/2005
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Name:	ELEMENTARY SCHOOL 2CD
Address:	6975 BROWNS VALLEY ROAD
City,State,Zip:	VACAVILLE, CA 95687
Facility ID:	48010003
Site Type:	School Cleanup
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	20.6
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	* Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Site Code:	104427
Assembly:	11
Senate:	03
Special Program Status:	Not reported
Status:	Certified
Status Date:	10/12/2007
Restricted Use:	NO
Funding:	School District
Latitude:	38.39820
Longitude:	-121.9784
APN:	049-190-11
Past Use:	AGRICULTURAL - ROW CROPS, RESIDENTIAL AREA
Potential COC:	Chlordane, DDD, DDE, DDT, Dieldrin, Heptachlor epoxide
Confirmed COC:	Dieldrin, Heptachlor epoxide, Chlordane, DDD, DDE, DDT
Potential Description:	SOIL
Alias Name:	VACAVILLE USD-PROPOSED ES 2CD
Alias Type:	Alternate Name
Alias Name:	049-190-11
Alias Type:	APN
Alias Name:	110033616228
Alias Type:	EPA (FRS #)
Alias Name:	104427
Alias Type:	Project Code (Site Code)
Alias Name:	48010003
Alias Type:	Envirostor ID Number

DRAFT

ELEMENTARY SCHOOL 2CD (Continued) **S108757284**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	12/11/2006
Comments:	DTSC reviewed and approved the workplan for additional OCP sampling.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	05/11/2007
Comments:	This report will come under the cover of the Completion Report and reviewed at that time.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	10/12/2007
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	06/25/2007
Comments:	DTSC received notice from the Department of Resource Management that a UST was removed from the site on 5/4/07 and that no further action for this item is necessary.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	06/14/2007
Comments:	DTSC reviewed samples collected for fill material and approved material for site usage.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Supplemental Site Investigation Workplan
Completed Date:	11/08/2005
Comments:	DTSC issued a conditional approval which served as the comment letter and an approval letter. Sampling is anticipated to occur December 5th or 6th.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	08/03/2005
Comments:	DTSC approved the PEA with a further action determination.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	12/20/2004
Comments:	DTSC approved the PEA workplan for implementation
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

DRAFT

ELEMENTARY SCHOOL 2CD (Continued) **S108757284**

Completed Document Type: Supplemental Site Investigation Report
Completed Date: 06/09/2006
Comments: DTSC approved the SSI Summary Report with a further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 03/22/2006
Comments: Approved the submittal dated 3/16/06 received 3/20/06 for stepout sampling to characterize chlordane at the site. Currents step-outs are up to 30 feet away from the structure. Maximun detection of chlordane found in the results of the second was 93,000 ug/kg (93 mg/kg- CHHSL is 0.43 mg/kg)

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 02/10/2006
Comments: Accepted the workplan for the additional step outs at the site to characterized the chlordane. First of the techmemos and second set of step samples for project. Chlordane is the COC. The maximum detection of chlordane was 30,000 ug/kg.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 11/07/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 09/19/2006
Comments: Fact Sheet was approved by Public Participation and ready for distribution to announce the start of the public comment period.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 09/29/2006
Comments: DTSC has reviewed and approved the Community Profile.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 03/25/2008
Comments: Cost recovery initiated and project closed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 12/07/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DRAFT

ELEMENTARY SCHOOL 2CD (Continued) **S108757284**

Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 08/25/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 06/12/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 11/08/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 11/02/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/19/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 09/27/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/19/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/28/2007
Comments: DTSC certifies that the removal of soil contaminated with organochlorine pesticides has been completed. Certification package was developed, reviewed, signed and placed into folder and on database.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: School Cleanup Agreement
Completed Date: 08/19/2005
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported

DRAFT

ELEMENTARY SCHOOL 2CD (Continued) **S108757284**

Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

50
NNE
1/2-1
0.941 mi.
4969 ft.

SPRIG CIRCUITS, INC.
765-A EUBANKS DRIVE (UNITS A,
VACAVILLE, CA 95688

RCRA-LQG **1000252519**
ENVIROSTOR **CAD980881098**

Relative:
Lower

Actual:
115 ft.

RCRA Listings:

Date Form Received by Agency:	20100528
Handler Name:	Sprig Circuits, Inc.
Handler Address:	765-A EUBANKS DRIVE (UNITS A,
Handler City,State,Zip:	VACAVILLE, CA 95688
EPA ID:	CAD980881098
Contact Name:	TYLER CHRISTENSEN
Contact Address:	765-A EUBANKS DR.
Contact City,State,Zip:	VACAVILLE, CA 95688
Contact Telephone:	707-447-7744
Contact Fax:	707-447-0896
Contact Email:	TYLER@SPRIGCIRCUITS.COIM
Contact Title:	SAFETY MANAGER
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	2009
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	765-A EUBANKS DR.
Mailing City,State,Zip:	VACAVILLE, CA 95688
Owner Name:	Klp Properties
Owner Type:	Private
Operator Name:	Sprig Circuits, Inc.
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN

DRAFT

SPRIG CIRCUITS, INC. (Continued) **1000252519**

Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20101006
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2009

Click Here for Biennial Reporting System Data:
Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D002
Waste Description:	Corrosive Waste
Waste Code:	D004
Waste Description:	Arsenic
Waste Code:	D007
Waste Description:	Chromium
Waste Code:	D008

DRAFT

SPRIG CIRCUITS, INC. (Continued) **1000252519**

Waste Description: Lead

Waste Code: F006
Waste Description: Wastewater Treatment Sludges From Electroplating Operations, Except From The Following Processes: (1) Sulfuric Acid Anodizing Of Aluminum; (2) Tin Plating On Carbon Steel; (3) Zinc Plating (Segregated Basis) On Carbon Steel; (4) Aluminum Or Zinc-Aluminum Plating On Carbon Steel; (5) Cleaning/Stripping Associated With Tin, Zinc, And Aluminum Plating On Carbon Steel; And (6) Chemical Etching And Milling Of Aluminum.

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SPRIG CIRCUITS INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	KLP PROPERTIES
Legal Status:	Private
Date Became Current:	20050720
Date Ended Current:	Not reported
Owner/Operator Address:	4432 PIEDMONT AVENUE
Owner/Operator City,State,Zip:	OAKLAND, CA 94611
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SPRIG CIRCUITS, INC
Legal Status:	Private
Date Became Current:	19831001
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported

DRAFT

SPRIG CIRCUITS, INC. (Continued) **1000252519**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	SPRIG CIRCUITS, INC.
Legal Status:	Private
Date Became Current:	19831001
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	SPRIG CIRCUITS, INC.
Legal Status:	Private
Date Became Current:	19831001
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	KLP PROPERTIES
Legal Status:	Private
Date Became Current:	20050720
Date Ended Current:	Not reported
Owner/Operator Address:	4432 PIEDMONT AVENUE
Owner/Operator City,State,Zip:	OAKLAND, CA 94611
Owner/Operator Telephone:	510-654-4257
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	SPRIG CIRCUITS, INC.
Legal Status:	Private
Date Became Current:	19931001
Date Ended Current:	Not reported
Owner/Operator Address:	765-A EUBANKS DRIVE
Owner/Operator City,State,Zip:	VACAVILLE, CA 95688
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	SPRIG CIRCUITS, INC.
Legal Status:	Private
Date Became Current:	19931001
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported

DRAFT

SPRIG CIRCUITS, INC. (Continued) **1000252519**

Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name: KLP PROPERTIES	
Legal Status:	Private
Date Became Current:	20050201
Date Ended Current:	Not reported
Owner/Operator Address:	4432 PIEDMONT AVENUE
Owner/Operator City,State,Zip:	OAKLAND, CA 94611
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20100528
Handler Name: SPRIG CIRCUITS, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	19960901
Handler Name: SPRIG CIRCUITS INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Ca
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	19831220
Handler Name: SPRIG CIRCUITS INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Ca
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

DRAFT

SPRIG CIRCUITS, INC. (Continued) **1000252519**

Receive Date: 19920225
Handler Name: SPRIG CIRCUITS INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19940330
Handler Name: SPRING CIRCUITS INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19960228
Handler Name: SPRIG CIRCUITS, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19990304
Handler Name: SPRIG CIRCUITS, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20001012
Handler Name: SPRIG CIRCUITS, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No

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SPRIG CIRCUITS, INC. (Continued) **1000252519**

Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20020304
Handler Name: SPRIG CIRCUITS INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20040226
Handler Name: SPRIG CIRCUITS, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20060228
Handler Name: SPRIG CIRCUITS, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20080211
Handler Name: SPRIG CIRCUITS, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No

DRAFT

SPRIG CIRCUITS, INC. (Continued) **1000252519**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 334412
NAICS Description: BARE PRINTED CIRCUIT BOARD MANUFACTURING

Has the Facility Received Notices of Violations:
Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: LDR - General
Date Violation was Determined: 19880519
Actual Return to Compliance Date: 19890727
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 19890630
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: R9
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19880815
Actual Return to Compliance Date: 19891119
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 19890821

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SPRIG CIRCUITS, INC. (Continued) **1000252519**

Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: R9
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Responsible Person: R9
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 17000
Final Monetary Amount: 17000
Paid Amount: Not reported
Final Count: 1
Final Amount: 17000

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: LDR - General
Date Violation was Determined: 19880815
Actual Return to Compliance Date: 19921119
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 19890821
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: R9
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Responsible Person: R9
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

DRAFT

SPRIG CIRCUITS, INC. (Continued) **1000252519**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 17000
Final Monetary Amount: 17000
Paid Amount: Not reported
Final Count: 1
Final Amount: 17000

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19880815
Actual Return to Compliance Date: 19891119
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 19880815
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: R9
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 20101117
Actual Return to Compliance Date: 20110322
Return to Compliance Qualifier: Documented
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported

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SPRIG CIRCUITS, INC. (Continued) **1000252519**

Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: LDR - General
Date Violation was Determined: 19880815
Actual Return to Compliance Date: 19921119
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 19880815
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: R9
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

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SPRIG CIRCUITS, INC. (Continued) **1000252519**

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Evaluation Action Summary:

Evaluation Date:	19880519
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19890727
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19880815
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION
Evaluation Responsible Person Identifier:	R9
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891119
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19880815
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION
Evaluation Responsible Person Identifier:	R9
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19921119
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19880815
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION
Evaluation Responsible Person Identifier:	R9
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891119
Scheduled Compliance Date:	Not reported

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SPRIG CIRCUITS, INC. (Continued) **1000252519**

Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20101117
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION
Evaluation Responsible Person Identifier:	BCOFE
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20110322
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19880815
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION
Evaluation Responsible Person Identifier:	R9
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19921119
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

ENVIROSTOR:

Name:	SPRIG CIRCUITS, INC.
Address:	765 EUBANKS DRIVE #B
City,State,Zip:	VACAVILLE, CA 95688
Facility ID:	71002695
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Sacramento
Assembly:	11
Senate:	03
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	38.39914
Longitude:	-121.9581

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SPRIG CIRCUITS, INC. (Continued) **1000252519**

APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD980881098
Alias Type: EPA Identification Number
Alias Name: 110000886872
Alias Type: EPA (FRS #)
Alias Name: 71002695
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

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Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
VACAVILLE	S121628039	CENTENNIAL PARK TRAIL DEV	CENTENNIAL PARK OFF OF BROWNS	95687	CIWQS

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

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Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/20/2023
Date Data Arrived at EDR: 12/20/2023
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 12/20/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/29/2024
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

DRAFT

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/29/2024
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/06/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

DRAFT

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/07/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 64

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/26/2023
Date Data Arrived at EDR: 11/17/2023
Date Made Active in Reports: 02/13/2024
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/26/2023
Date Data Arrived at EDR: 11/17/2023
Date Made Active in Reports: 02/13/2024
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

DRAFT

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/12/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 77

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/23/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/11/2024
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/23/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/23/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/11/2024
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/23/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/06/2023
Date Data Arrived at EDR: 11/07/2023
Date Made Active in Reports: 02/05/2024
Number of Days to Update: 90

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/06/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

DRAFT

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

DRAFT

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

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Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

DRAFT

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/27/2024
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

DRAFT

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 11/16/2023
Date Data Arrived at EDR: 11/16/2023
Date Made Active in Reports: 02/13/2024
Number of Days to Update: 89

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

DRAFT

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 11/28/2023
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 02/27/2024
Number of Days to Update: 89

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

DRAFT

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

DRAFT

Lists of state and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/23/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/11/2024
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/23/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/12/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/13/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 03/07/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 08/15/2023
Date Data Arrived at EDR: 08/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/14/2023
Next Scheduled EDR Contact: 03/25/2024
Data Release Frequency: Semi-Annually

DRAFT

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 86

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 83

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/20/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/26/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DRAFT

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 11/17/2023
Date Data Arrived at EDR: 11/17/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 82
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/23/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/11/2024
Number of Days to Update: 79
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/23/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 09/28/2023
Date Made Active in Reports: 12/18/2023
Number of Days to Update: 81
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

DRAFT

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/16/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/09/2024
Number of Days to Update: 84
Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 01/16/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 11/17/2023
Date Data Arrived at EDR: 11/17/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 82
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 10/30/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83
Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

DRAFT

Date of Government Version: 10/16/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/09/2024
Number of Days to Update: 84

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/16/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/21/2023
Date Data Arrived at EDR: 11/22/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 86

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/26/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 11/14/2023
Date Data Arrived at EDR: 12/22/2023
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/22/2023
Date Data Arrived at EDR: 11/22/2023
Date Made Active in Reports: 02/15/2024
Number of Days to Update: 85

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

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HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/12/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 77

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/01/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 10/05/2023
Number of Days to Update: 79

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/18/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/27/2024
Number of Days to Update: 84

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

DRAFT

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 09/28/2023
Date Data Arrived at EDR: 11/10/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 89

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/13/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/10/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/06/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/11/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

DRAFT

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/14/2023
Next Scheduled EDR Contact: 03/25/2024
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 11/13/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 86
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/15/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/19/2023
Date Data Arrived at EDR: 10/20/2023
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 88
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Annually

DRAFT

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 09/01/2023
Date Data Arrived at EDR: 09/27/2023
Date Made Active in Reports: 12/21/2023
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/12/2024
Next Scheduled EDR Contact: 04/19/2024
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 03/06/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Annually

DRAFT

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/26/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/20/2023
Date Data Arrived at EDR: 09/01/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 19

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 11/27/2023
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

DRAFT

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 12/19/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

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Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/11/2024
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 5

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/02/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/15/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/26/2024
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

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Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 01/02/2024
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 1

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/01/2023
Date Data Arrived at EDR: 11/17/2023
Date Made Active in Reports: 02/13/2024
Number of Days to Update: 88

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/21/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/22/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

DRAFT

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/22/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 11/28/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 12

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/22/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/03/2023
Date Data Arrived at EDR: 11/08/2023
Date Made Active in Reports: 11/20/2023
Number of Days to Update: 12

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/20/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

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Date of Government Version: 12/17/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/06/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 89
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/10/2023
Date Data Arrived at EDR: 11/10/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 89
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/13/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67
Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67
Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7
Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

DRAFT

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

DRAFT

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 03/04/2024
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

DRAFT

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 12/27/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 12/27/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: No Update Planned

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data
The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing
A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 11/30/2023
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 02/26/2024
Number of Days to Update: 88

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/06/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing
Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 11/30/2023
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DRAFT

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 11/30/2023
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/13/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 03/07/2024
Number of Days to Update: 85

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 03/31/2023
Date Data Arrived at EDR: 05/08/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 84

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

DRYCLEAN NO COAST UNIFIED DIST: North Coast Unified Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473

Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SIERRA DIST: Northern Sierra Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 05/07/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455

Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SONOMA CO DIST: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRAFT

DRYCLEAN SANTA BARB CO DIST: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA CO DIST: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468
Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO METO DIST: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 08/15/2023
Date Data Arrived at EDR: 08/17/2023
Date Made Active in Reports: 10/31/2023
Number of Days to Update: 75
Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB CO DIST: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 10/13/2023
Number of Days to Update: 78
Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE CO DIST: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 10/18/2023
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 90
Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN FEATHER RIVER DIST: Feather River Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88
Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQ VAL DIST: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 05/24/2023
Date Data Arrived at EDR: 05/30/2023
Date Made Active in Reports: 08/21/2023
Number of Days to Update: 83
Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRAFT

DRYCLEAN EAST KERN DIST: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 01/12/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL CO DIST: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDO CO DIST: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE DESERT DIST: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTEREY BAY DIST: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA CO DIST: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO DIST: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRAFT

DRYCLEAN PLACER CO DIST: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA DIST: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432

Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS CO DIST: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 816

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 01/26/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

DRYCLEAN LAKE CO DIST: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455

Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/14/2023
Date Data Arrived at EDR: 11/16/2023
Date Made Active in Reports: 02/12/2024
Number of Days to Update: 88

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/20/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

DRYCLEAN VENTURA CO DIST: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 01/04/2024
Date Data Arrived at EDR: 01/16/2024
Date Made Active in Reports: 02/08/2024
Number of Days to Update: 23

Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRAFT

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 11/21/2023
Date Data Arrived at EDR: 11/22/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 86

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/26/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/31/2023
Date Data Arrived at EDR: 09/08/2023
Date Made Active in Reports: 11/27/2023
Number of Days to Update: 80

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Annually

DRYCLEAN GLENN CO DIST: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 05/02/2023
Date Data Arrived at EDR: 05/03/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 83

Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO CO DIST: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 08/08/2023
Date Data Arrived at EDR: 08/09/2023
Date Made Active in Reports: 10/26/2023
Number of Days to Update: 78

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 06/09/2023
Date Made Active in Reports: 08/30/2023
Number of Days to Update: 82

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/14/2023
Next Scheduled EDR Contact: 03/25/2024
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

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Date of Government Version: 10/16/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/09/2024
Number of Days to Update: 84

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/16/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 09/13/2023
Date Data Arrived at EDR: 09/14/2023
Date Made Active in Reports: 09/21/2023
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/08/2023
Date Data Arrived at EDR: 11/22/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 86

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/20/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 02/07/2024
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 0

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/07/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 02/07/2024
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 0

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/07/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

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Date of Government Version: 10/02/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 12/27/2023
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Quarterly

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 10/26/2023
Date Data Arrived at EDR: 10/27/2023
Date Made Active in Reports: 01/29/2024
Number of Days to Update: 94

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 12/26/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 07/05/2022
Date Made Active in Reports: 09/19/2022
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 86

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/08/2023
Date Data Arrived at EDR: 11/22/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 86

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/06/2023
Date Data Arrived at EDR: 11/07/2023
Date Made Active in Reports: 02/05/2024
Number of Days to Update: 90

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/06/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

DRAFT

Date of Government Version: 11/22/2023
Date Data Arrived at EDR: 11/22/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 86
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/23/2024
Number of Days to Update: 86
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/06/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 02/29/2024
Number of Days to Update: 85
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82
Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Annually

SANTA CRUZ CO SITE MITI: Site Mitigation Listing
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20
Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/27/2024
Number of Days to Update: 90
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

DRAFT

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 12/12/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 11/29/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

DRAFT

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/22/2023
Date Data Arrived at EDR: 11/22/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 86

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/16/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/09/2024
Number of Days to Update: 84

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/16/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

DRAFT

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/05/2023
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Varies

UST FINDER: UST Finder Database

EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database

US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

DRAFT

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/26/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Semi-Annually

DRAFT

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 09/27/2023
Date Data Arrived at EDR: 09/28/2023
Date Made Active in Reports: 12/18/2023
Number of Days to Update: 81

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/26/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 12/26/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 09/12/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/04/2023
Number of Days to Update: 82

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/12/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

DRAFT

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 10/20/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 84

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 10/24/2023
Date Data Arrived at EDR: 10/25/2023
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 83

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 02/05/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 12/26/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

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CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 10/10/2023
Date Data Arrived at EDR: 10/11/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 85

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 10/30/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 02/12/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 10/30/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 02/12/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

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Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 10/27/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 11/21/2023
Number of Days to Update: 20

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/09/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/01/2023
Date Data Arrived at EDR: 10/06/2023
Date Made Active in Reports: 12/27/2023
Number of Days to Update: 82

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/09/2023
Date Data Arrived at EDR: 10/09/2023
Date Made Active in Reports: 12/27/2023
Number of Days to Update: 79

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/10/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Varies

DRAFT

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/04/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/13/2023
Date Data Arrived at EDR: 07/13/2023
Date Made Active in Reports: 09/27/2023
Number of Days to Update: 76

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 12/01/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 12/14/2023
Number of Days to Update: 1

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 12/01/2023
Date Data Arrived at EDR: 12/13/2023
Date Made Active in Reports: 03/07/2024
Number of Days to Update: 85

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/09/2024
Number of Days to Update: 84

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/19/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Annually

DRAFT

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/04/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/12/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 42

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 12/18/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

DRAFT

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/20/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/15/2023
Date Data Arrived at EDR: 11/20/2023
Date Made Active in Reports: 02/15/2024
Number of Days to Update: 87

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/12/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/16/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/16/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/16/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: No Update Planned

NEVADA COUNTY:

DRAFT

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/31/2023
Date Data Arrived at EDR: 11/03/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 81

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 10/10/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/10/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 10/10/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/09/2023
Date Data Arrived at EDR: 11/09/2023
Date Made Active in Reports: 11/21/2023
Number of Days to Update: 12

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/26/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

RIVERSIDE COUNTY:

DRAFT

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 09/29/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 12/27/2023
Number of Days to Update: 84

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/05/2023
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 09/29/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 12/27/2023
Number of Days to Update: 84

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/18/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/18/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 01/17/2024
Date Data Arrived at EDR: 01/18/2024
Date Made Active in Reports: 01/26/2024
Number of Days to Update: 8

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

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Date of Government Version: 11/08/2023
Date Data Arrived at EDR: 11/09/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 90

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/12/2024
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/27/2023
Date Data Arrived at EDR: 11/27/2023
Date Made Active in Reports: 02/16/2024
Number of Days to Update: 81

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 02/27/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/04/2023
Date Data Arrived at EDR: 04/05/2023
Date Made Active in Reports: 06/27/2023
Number of Days to Update: 83

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

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Date of Government Version: 10/30/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 10/30/2023
Date Data Arrived at EDR: 11/01/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 10/15/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/11/2024
Number of Days to Update: 86

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 01/18/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/08/2024
Next Scheduled EDR Contact: 06/24/2024
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/08/2023
Date Data Arrived at EDR: 11/09/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 90

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/12/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

SAN MATEO COUNTY:

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BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/07/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/07/2023
Date Data Arrived at EDR: 11/08/2023
Date Made Active in Reports: 11/16/2023
Number of Days to Update: 8
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/12/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/16/2024
Next Scheduled EDR Contact: 06/03/2024
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

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CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/09/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/23/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/12/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/12/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

DRAFT

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/04/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/24/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 19

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/26/2024
Next Scheduled EDR Contact: 06/10/2024
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 12/05/2023
Date Data Arrived at EDR: 02/01/2024
Date Made Active in Reports: 02/28/2024
Number of Days to Update: 27

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 10/10/2023
Date Data Arrived at EDR: 10/11/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

TUOLUMNE COUNTY:

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CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/26/2023
Date Data Arrived at EDR: 10/20/2023
Date Made Active in Reports: 01/11/2024
Number of Days to Update: 83

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/16/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/18/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/11/2024
Number of Days to Update: 79

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/16/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/28/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 02/26/2024
Number of Days to Update: 89

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/05/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Quarterly

YOLO COUNTY:

DRAFT

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/21/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 12/27/2023
Number of Days to Update: 84

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 12/18/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 10/30/2023
Date Data Arrived at EDR: 11/03/2023
Date Made Active in Reports: 01/23/2024
Number of Days to Update: 81

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/06/2023
Date Data Arrived at EDR: 11/07/2023
Date Made Active in Reports: 01/31/2024
Number of Days to Update: 85

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/06/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 12/27/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/26/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

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PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/12/2024
Next Scheduled EDR Contact: 05/27/2024
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/01/2024
Next Scheduled EDR Contact: 06/17/2024
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

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Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CENTENNIAL PARK
270 BROWNS VALLEY PARKWAY
VACAVILLE, CA 95688

TARGET PROPERTY COORDINATES

Latitude (North):	38.379074 - 38° 22' 44.67''
Longitude (West):	121.970177 - 121° 58' 12.64''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	589951.7
UTM Y (Meters):	4248171.0
Elevation:	127 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	50006299 ALLENDALE, CA
Version Date:	2022
South Map:	50006321 ELMIRA, CA
Version Date:	2022
Southwest Map:	50005533 FAIRFIELD NORTH, CA
Version Date:	2021
Northwest Map:	50004722 MOUNT VACA, CA
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

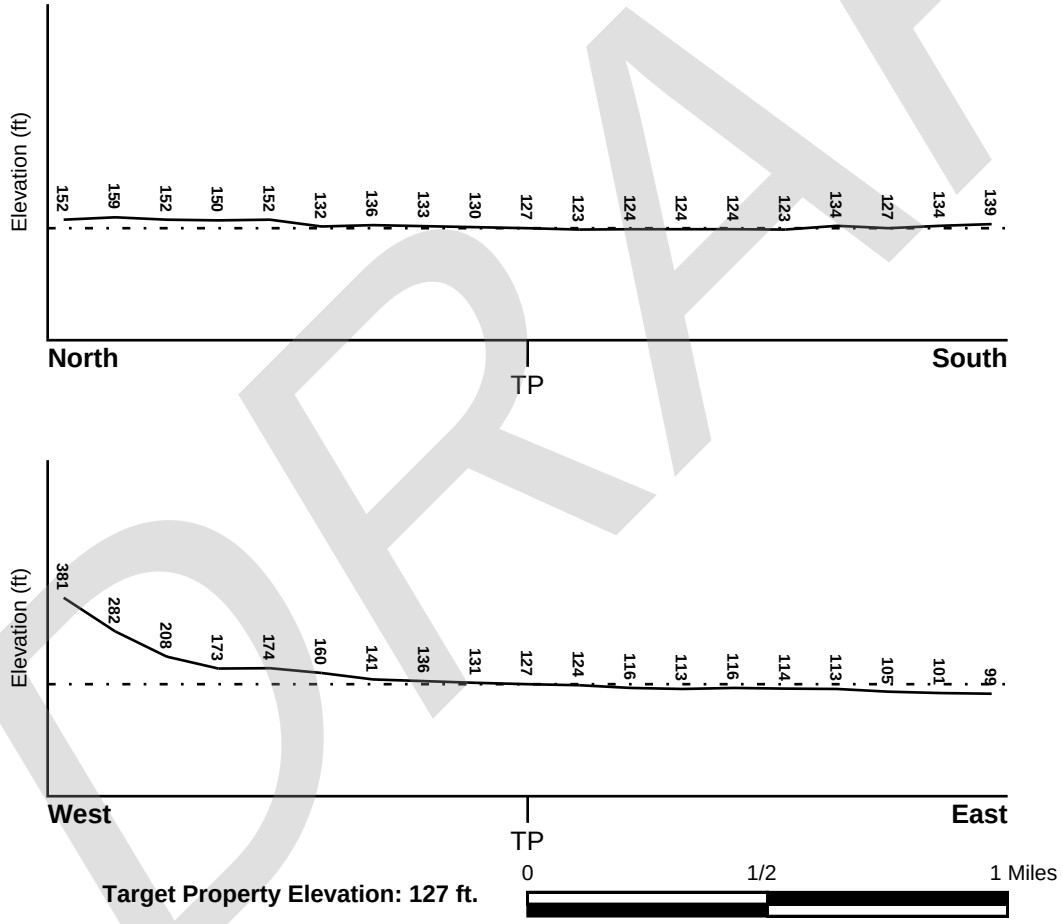
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06095C0163E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06095C0164E	FEMA FIRM Flood data
06095C0277E	FEMA FIRM Flood data
06095C0276E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
ALLENDALE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

DRAFT

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Tertiary
Series:	Pliocene
Code:	Tpc *(decoded above as Era, System & Series)*

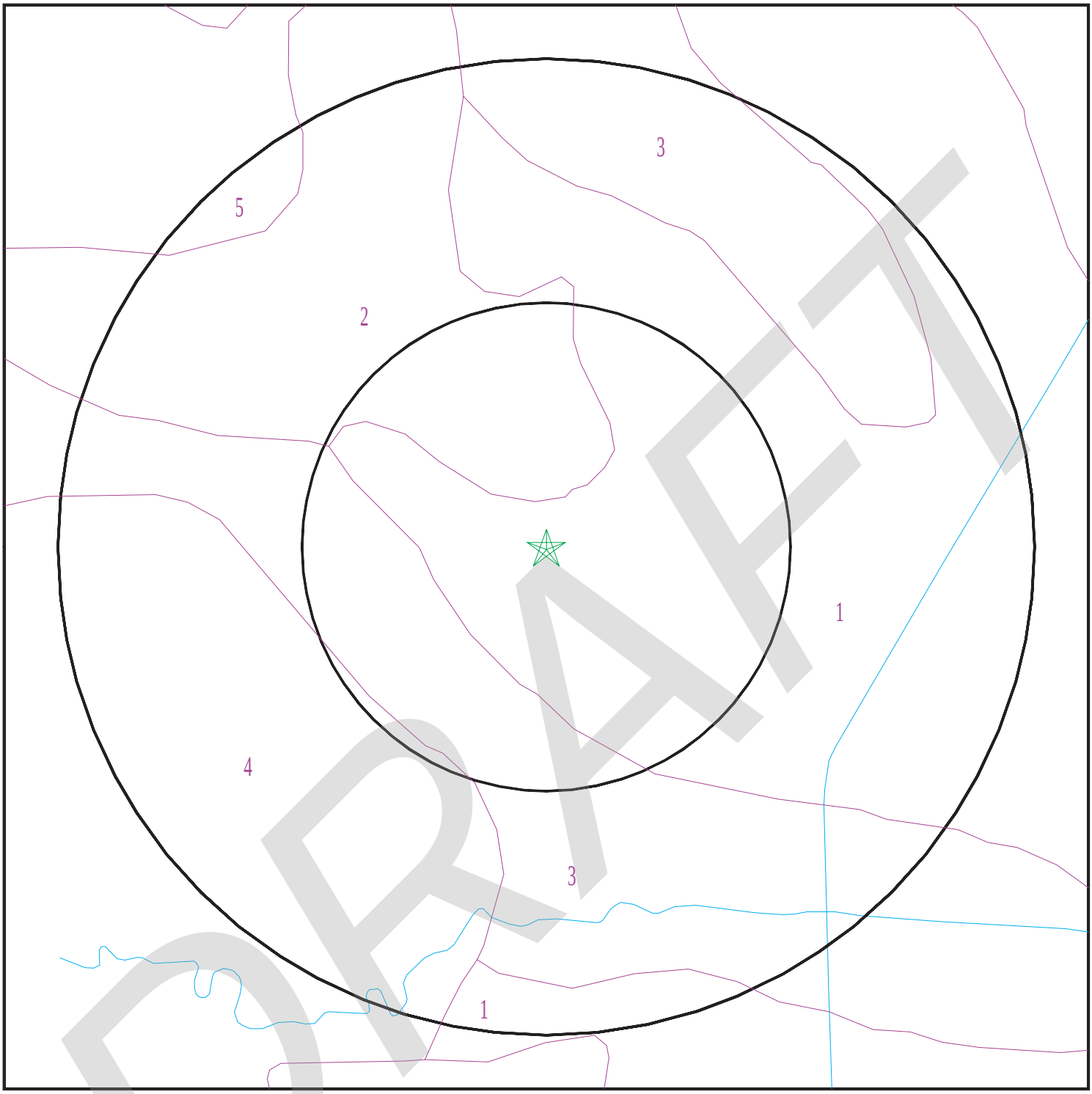
GEOLOGIC AGE IDENTIFICATION

Category: Continental Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DRAFT

SSURGO SOIL MAP - 7593477.2s



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Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Centennial Park	CLIENT:	Kleinfelder, Inc.
ADDRESS:	270 Browns Valley Parkway Vacaville CA 95688	CONTACT:	Stefan Birardi
LAT/LONG:	38.379074 / 121.970177	INQUIRY #:	7593477.2s
		DATE:	March 12, 2024 5:24 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Clear Lake

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 138 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	44 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
2	44 inches	59 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: San Ysidro

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	25 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	25 inches	35 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
3	35 inches	53 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
4	53 inches	68 inches	stratified sandy loam to clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: Capay

Soil Surface Texture: silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

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Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
2	20 inches	50 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
3	50 inches	79 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4

Soil Map ID: 4

Soil Component Name: Rincon

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1
2	22 inches	44 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1
3	44 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1

Soil Map ID: 5

Soil Component Name: Corning

Soil Surface Texture: gravelly loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
2	16 inches	25 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
3	25 inches	59 inches	very gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000188041	1/2 - 1 Mile West
4	USGS40000188037	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

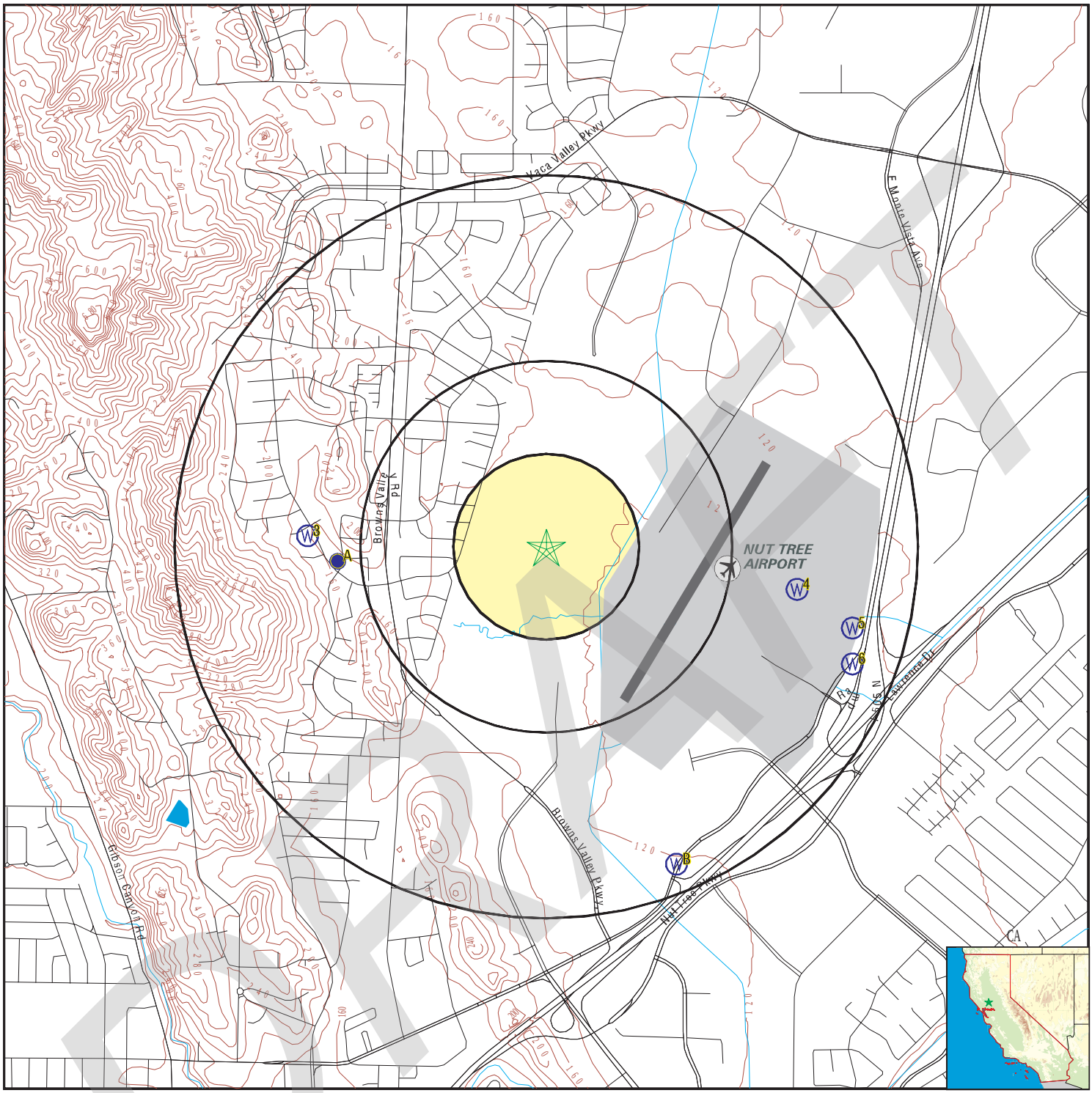
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CAUSGSN00006114	1/2 - 1 Mile West
3	CADWR9000039052	1/2 - 1 Mile West
5	CADWR9000039035	1/2 - 1 Mile ESE
6	CADWR9000039031	1/2 - 1 Mile ESE
B7	CAEDF0000142528	1/2 - 1 Mile SSE
B8	CAEDF0000047672	1/2 - 1 Mile SSE
B9	CAEDF0000053604	1/2 - 1 Mile SSE
B10	CAEDF0000140985	1/2 - 1 Mile SSE
B11	CAEDF0000110559	1/2 - 1 Mile SSE
B12	CAEDF0000033320	1/2 - 1 Mile SSE
B13	CAEDF0000114998	1/2 - 1 Mile SSE
B14	CAEDF0000098390	1/2 - 1 Mile SSE
B15	CAEDF0000109042	1/2 - 1 Mile SSE
B16	CAEDF0000063677	1/2 - 1 Mile SSE
B17	CAEDF0000055944	1/2 - 1 Mile SSE
B18	CAEDF0000140709	1/2 - 1 Mile SSE
B19	CAEDF0000129084	1/2 - 1 Mile SSE
B20	CAEDF0000041260	1/2 - 1 Mile SSE

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PHYSICAL SETTING SOURCE MAP - 7593477.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Centennial Park	CLIENT:	Kleinfelder, Inc.
ADDRESS:	270 Browns Valley Parkway Vacaville CA 95688	CONTACT:	Stefan Birardi
LAT/LONG:	38.379074 / 121.970177	INQUIRY #:	7593477.2s
		DATE:	March 12, 2024 5:24 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
A1 **West** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CAUSGSN00006114**

Well ID:	USGS-382243121584601	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-382243121584601	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-382243121584601&store_num=		
GeoTracker Data:	Not Reported		

	Database	EDR ID Number
A2 **West** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000188041**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N001W09L001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	500
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

	Database	EDR ID Number
3 **West** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADWR9000039052**

State Well #:	06N01W09L002M	Station ID:	27643
Well Name:	Not Reported	Basin Name:	Solano
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	500	Well Completion Rpt #:	Not Reported

	Database	EDR ID Number
4 **East** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000188037**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N001W10K001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19610518	Well Depth:	560
Well Depth Units:	ft	Well Hole Depth:	566

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Well Hole Depth Units: ft

5
ESE **CA WELLS** **CADWR9000039035**
1/2 - 1 Mile
Lower

State Well #:	06N01W10R001M	Station ID:	6930
Well Name:	Not Reported	Basin Name:	Solano
Well Use:	Irrigation	Well Type:	Unknown
Well Depth:	246	Well Completion Rpt #:	USGS

6
ESE **CA WELLS** **CADWR9000039031**
1/2 - 1 Mile
Lower

State Well #:	06N01W10R004M	Station ID:	6931
Well Name:	Not Reported	Basin Name:	Solano
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	110	Well Completion Rpt #:	Not Reported

B7
SSE **CA WELLS** **CAEDF0000142528**
1/2 - 1 Mile
Lower

Well ID:	T0609500353-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500353&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500353&assigned_name=MW-1		

B8
SSE **CA WELLS** **CAEDF0000047672**
1/2 - 1 Mile
Lower

Well ID:	T0609500353-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500353&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500353&assigned_name=MW-9		

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B9
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000053604**

Well ID:	T0609518478-S-6	Well Type:	MONITORING
Source:	EDF	Other Name:	S-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609518478&assigned_name=S-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609518478&assigned_name=S-6		

B10
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000140985**

Well ID:	T0609500353-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500353&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500353&assigned_name=MW-4		

B11
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000110559**

Well ID:	T0609500353-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500353&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500353&assigned_name=MW-3		

B12
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000033320**

Well ID:	T0609500353-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500353&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500353&assigned_name=MW-8		

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B13
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000114998**

Well ID:	T0609500353-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500353&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500353&assigned_name=MW-7		

B14
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000098390**

Well ID:	T0609518478-S-7	Well Type:	MONITORING
Source:	EDF	Other Name:	S-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609518478&assigned_name=S-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609518478&assigned_name=S-7		

B15
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000109042**

Well ID:	T0609500353-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500353&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500353&assigned_name=MW-2		

B16
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000063677**

Well ID:	T0609518478-S-5	Well Type:	MONITORING
Source:	EDF	Other Name:	S-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609518478&assigned_name=S-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609518478&assigned_name=S-5		

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Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B17
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000055944**

Well ID:	T0609518478-S-4	Well Type:	MONITORING
Source:	EDF	Other Name:	S-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609518478&assigned_name=S-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609518478&assigned_name=S-4		

B18
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000140709**

Well ID:	T0609518478-S-1	Well Type:	MONITORING
Source:	EDF	Other Name:	S-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609518478&assigned_name=S-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609518478&assigned_name=S-1		

B19
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000129084**

Well ID:	T0609518478-S-2	Well Type:	MONITORING
Source:	EDF	Other Name:	S-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609518478&assigned_name=S-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609518478&assigned_name=S-2		

B20
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000041260**

Well ID:	T0609518478-S-3	Well Type:	MONITORING
Source:	EDF	Other Name:	S-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609518478&assigned_name=S-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609518478&assigned_name=S-3		

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95688	14	0

Federal EPA Radon Zone for SOLANO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95688

Number of sites tested: 8

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

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PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

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PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

Geothermal Wells Listing
Department of Conservation
Telephone: 916-445-9686
Geothermal well means a well constructed to extract or return water to the ground after it has been used for heating or cooling purposes. Geothermal wells in California (except for wells on federal leases which are administered by the Bureau of Land Management) are permitted, drilled, operated, and permanently sealed and closed (plugged and abandoned) under requirements and procedures administered by the Geothermal Section of the Department of Conservations Geologic Energy Management Division (CalGEM, formerly DOGGR).

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

DRAFT

PHYSICAL SETTING SOURCE RECORDS SEARCHED

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX C

USER PROVIDED AND REGULATORY AGENCY DOCUMENTATION

DRAFT

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Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688

Inquiry Number: 7593477.6
March 12, 2024

The EDR Property Tax Map Report

DRAFT

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

NO COVERAGE

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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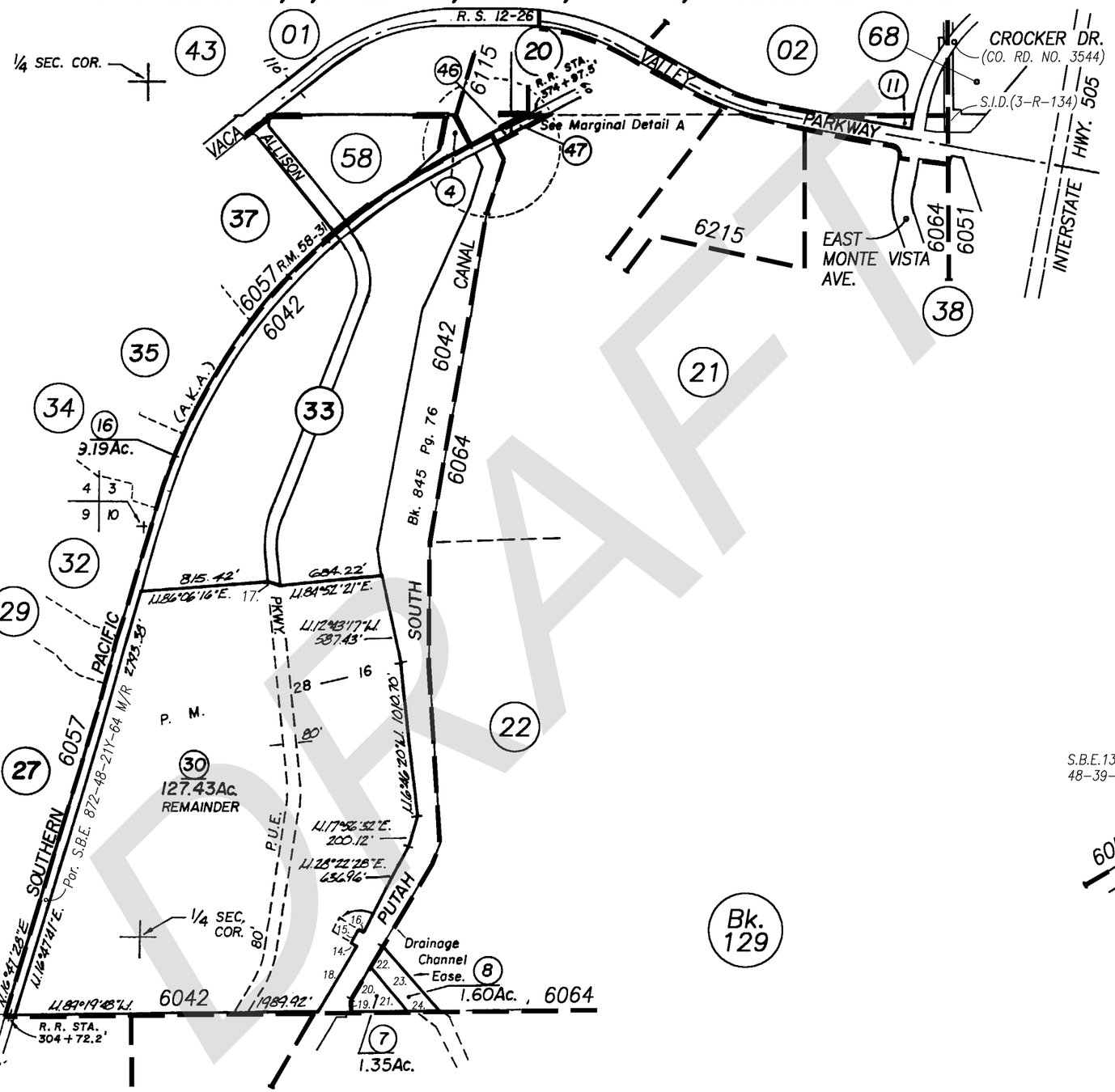
DRAFT

POR. LOT 37, RANCHO LOS PUTOS
POR. SEC. 3,4,9 & 10, T.6N., R.1W., M.D.B. & M. EXT.

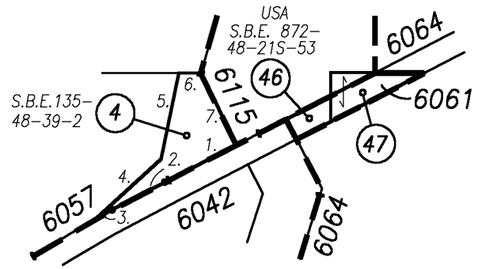
Tax Area Code
6042,6057
6064,6061

133-07

1"= 800'



1.	S.62°42'00"W.	211.40'
2.	R=3849.83'	141.10'
3.	R=2894.90'	72.88'
4.	N.47°44'00"E.	241.46'
5.	N.10°55'00"E.	232.28'
6.	S.89°55'00"E.	54.52'
7.	S.27°16'00"E.	213.61'
8.		
9.		
10.		
11.		
12.		
13.		
14.	N.59°22'06"W.	45.00'
15.	N.30°37'27"E.	100.01'
16.	N.59°22'46"W.	35.00'
17.	N.74°34'15"W.	85.44'
18.	N.30°37'27"E.	455.74'
19.	S.01°50'00"E.	70.30'
20.	S.31°19'00"W.	250.00'
21.	N.40°34'00"W.	379.60'
22.	S.31°19'00"W.	150.00'
23.	S.41°53'00"E.	562.90'
24.	N.89°18'00"W.	206.90'



MARGINAL DETAIL "A"
Scale: 1"= 400'

Bk. 129

Peters Ranch , R.M. Bk. 02 Pg. 39
Ridgeview Unit No. 7 , R.M. Bk. 58 Pg. 31
Lauralwood Unit No. 1 , R.M. Bk. 73 Pg. 90

Assessor's Block Numbers Shown in Ellipses, Assessor's Parcel Numbers Shown in Circles

020-12 to Pg.68(Pm)	11-17-16	Cr
S.B.E. 11-005	2-10-11	JS
Por to Pg. 58	6-15-07	DV
070-52 TO SUB.	5-13-04	JS
REVISION	DATE	BY

NOTE: This map is for assessment purposes only. It is not intended to define legal boundary rights or imply compliance with land division laws.

CITY OF VACAVILLE
Assessor's Map Bk. 133 Pg. 07
County of Solano, Calif.

17-18

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DRAFT

Return | New e r | T x Info | Print

Propert n ormation

APN:
0129220030

Neighborhood:
Un ssigned

Property Address:
Unknown Unknown C

Class:
9800 - Government l & Mis ell neous

TAG: 006057



Ownership Histor

Effective Date	Document Number	Ownership Interest (%)
6/15/11	201100053199	100.00
12/27/88	CHCLR-2154949	100.00
12/27/88	198800172401	100.00
3/25/83	198300020098	100.00
3/25/83	198300020098	100.00

Trans er Histor

Sale Date	Document Number	Book	Page
6/15/11	201100053199		
1/1/90	CHCLR-2154949		
12/27/88	198800172401		
3/25/83	198300020098		
3/25/83	198300020098		

Value Histor

Tax Year : 2023 Assessmen ID 1413 50

Event Date	Value Type	Assessment Event	Roll Caste	Change Reason	Attribute	Amount
1/1/23	Assessment V lue	Annu l	Annu l	Conversion Def ult	L nd	$0.00
						Value Type Total: $0.00
1/1/23	F tored B se Ye r V lue	Annu l	Annu l	Conversion Def ult	L nd	$0.00
						Value Type Total: $0.00
1/1/23	Net T x ble V lue	Annu l	Annu l	Conversion Def ult		$0.00
						Value Type Total: $0.00

Tax Year : 2022 Assessment ID : 1262925

Tax Year : 2021 Assessment ID : 1112007

Tax Year : 2020 Assessment ID : 961946

Tax Year : 2019 Assessment ID : 812712

Tax Year : 2018 Assessment ID : 665587

Tax Year : 2017 Assessment ID : 519249

Propert eatures

Year Built	Feature	Size	Size Description
Property fe ture inform tion is not v il ble for t is re ord.			

Land n ormation

Land Type	Description	Acreage	Use Type
Leg y L nd	L ndLine 001, 0129220030 / Leg y L nd	30.00	Un v il ble

Land Use

DRAFT

Land Use Type	Use Type	A reage
	Land use in a i n is n available his ec d.	

Buil ing / tructure Info.

Building	Year Built	Grade
	Building / S uc u es da a unavailable his ec d.	

DRAFT

Return | New e r | T x Info | Print

Propert n ormation

APN:
0129220040

Neighborhood:
Un ssigned

Property Address:
Unknown Unknown C

Class:
9800 - Government l & Mis ell neous

TAG: 006056



Ownership Histor

Effective Date	Document Number	Ownership Interest (%)
6/15/11	201100053199	100.00
12/27/88	CHCLR-1064057	100.00
12/27/88	198800172401	100.00
5/17/85	198500041302	100.00
3/25/83	198300020098	100.00
5/19/78	BORN-197800039341	100.00
5/19/78	BORN-197800039341	100.00

Trans er Histor

Sale Date	Document Number	Book	Page
6/15/11	201100053199		
1/1/90	CHCLR-1064057		
12/27/88	198800172401		
5/17/85	198500041302		
3/25/83	198300020098		
5/19/78	BORN-197800039341		
5/19/78	BORN-197800039341		

Value Histor

Propert Features

Year Built	Feature	Size	Size Description
Property fe ture inform tion is not v il ble for t is re ord.			

Land n ormation

Land Type	Description	Acreage	Use Type
Leg y L nd	L ndLine 001, 0129220040 / Leg y L nd	43.29	Un v il ble

Land Use

Land Use Type	Use Type	Acreage
L nd use inform tion is not v il ble for t is re ord.		

Buildin s tru ture n o.

Building	Year Built	Grade
Building / tru tures d t un v il ble for t is re ord.		

DRAFT

Return | New e r | T x Info | Print

Propert n ormation

APN:
0129220050

Neighborhood:
Un ssigned

Property Address:
Unknown Unknown C

Class:
9800 - Government l & Mis ell neous

TAG: 006056



Ownership Histor

Effective Date	Document Number	Ownership Interest (%)
6/15/11	201100053199	100.00
11/8/99	199900096908	100.00
3/25/83	BORN-198300020058	100.00
3/25/83	BORN-198300020058	100.00

Trans er Histor

Sale Date	Document Number	Book	Page
6/15/11	201100053199		
11/8/99	199900096908		
3/25/83	BORN-198300020058		
3/25/83	BORN-198300020058		

Value Histor

Tax Year : 2023 Assessmen ID 141375

Event Date	Value Type	Assessment Event	Roll Caste	Change Reason	Attribute	Amount
1/1/23	Assessment V lue	Annu l	Annu l	Conversion Def ult	L nd	$0.00
						Value Type Total: $0.00
1/1/23	F tored B se Ye r V lue	Annu l	Annu l	Conversion Def ult	L nd	$0.00
						Value Type Total: $0.00
1/1/23	Net T x ble V lue	Annu l	Annu l	Conversion Def ult		$0.00
						Value Type Total: $0.00

Tax Year : 2022 Assessment ID : 1262927

Tax Year : 2021 Assessment ID : 1112009

Tax Year : 2020 Assessment ID : 961948

Tax Year : 2019 Assessment ID : 812714

Tax Year : 2018 Assessment ID : 665589

Tax Year : 2017 Assessment ID : 519251

Propert Features

Year Built	Feature	Size	Size Description
Property fe ture inform tion is not v il ble for t is re ord.			

Land n ormation

Land Type	Description	Acreage	Use Type
Leg y L nd	L ndLine 001, 0129220050 / Leg y L nd	62.39	Un v il ble

Land Use

Land Use Type	Use Type	Acreage
L nd use inform tion is not v il ble for t is re ord.		

DRAFT

Buildings u u e Info.

Building	Year Built	Grade
Building / Stru tures data unavailable for this re ord.		

DRAFT

Return | New e r | T x Info | Print

Propert n ormation

APN:
0133070300

Neighborhood:
Un ssigned

Property Address:
Unknown Unknown C

Class:
9800 - Government l & Mis ell neous

TAG: 006042



Ownership Histor

Effective Date	Document Number	Ownership Interest (%)
6/15/11	201100053202	100.00
1/28/08	200800005854	100.00
1/25/08	200800005584	100.00
10/21/98	CHCLR-255256	100.00
10/21/98	199800084202	100.00
7/12/90	199000054394	100.00
4/30/90	199000032472	100.00
12/19/89	CHCLR-255246	100.00
12/19/89	198900090963	100.00
12/19/89	198900090962	100.00

1 2 10 items per p ge 1 - 10 of 12 items

Trans er Histor

Sale Date	Document Number	Book	Page
6/15/11	201100053202		
1/28/08	200800005854		
1/25/08	200800005584	0018	0013
1/1/99	CHCLR-255256		
10/21/98	199800084202		
7/12/90	199000054394		
4/30/90	199000032472		
1/1/90	CHCLR-255246		
12/19/89	198900090963		
12/19/89	198900090962		

1 2 10 items per p ge 1 - 10 of 12 items

Value Histor

Tax Year : 2023 Assessment ID : 1420897

Event Date	Value Type	Assessment Event	Roll Caste	Change Reason	Attribute	Amount
1/1/23	Assessment V lue	Annu l	Annu l	Conversion Def ult	L nd	$0.00
						Value Type Total: $0.00
1/1/23	F tored B se Ye r V lue	Annu l	Annu l	Conversion Def ult	L nd	$0.00
						Value Type Total: $0.00
1/1/23	Net T x ble V lue	Annu l	Annu l	Conversion Def ult		$0.00
						Value Type Total: $0.00

Tax Year : 2022 Assessment ID : 1270072

Tax Year : 2021 Assessment ID : 1119153

Tax Year : 2020 Assessment ID : 969110

Tax Year : 2019 Assessment ID : 819878

Tax Year : 2018 Assessment ID : 672752

Tax Year : 2017 Assessment ID : 526412

DRAFT

Property Fe t re

Year Built	Feature	Size	Size Description
roperty feature information is not available for this re ord.			

L nd Inform tion

Land Type	Description	Acreage	Use Type
Lega y Land	LandLine 001, 0133070300 / Lega y Land	127.43	Unavailable

L nd U e

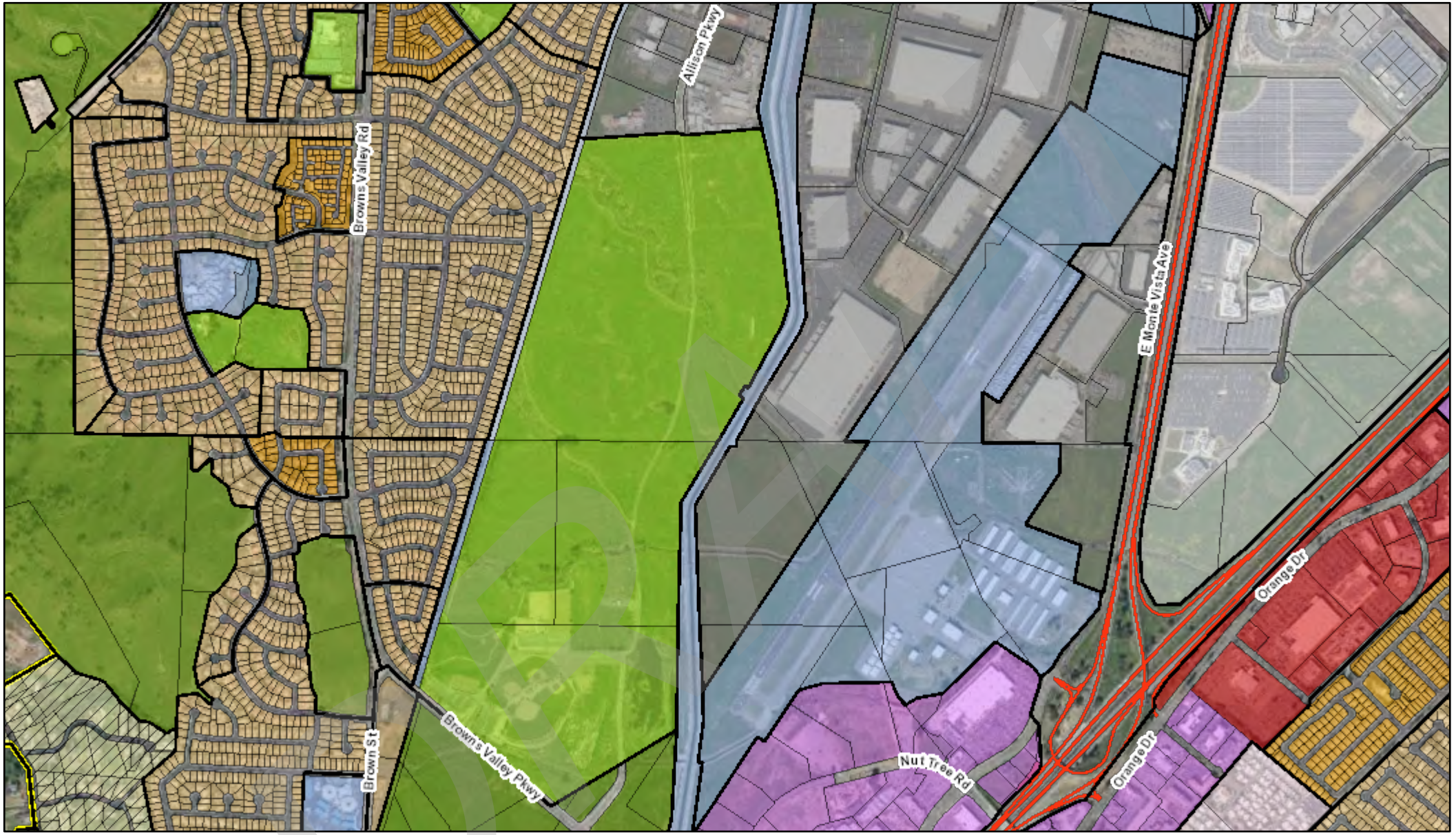
Land Use Type	Use Type	Acreage
Land use information is not available for this re ord.		

B ilding / Str ct re Info.

Building	Year Built	Grade
Building / Stru tures data unavailable for this re ord.		

DRAFT

City of Vacaville Zoning Map - Centennial Park



4/8/2024, 7:07:33 PM

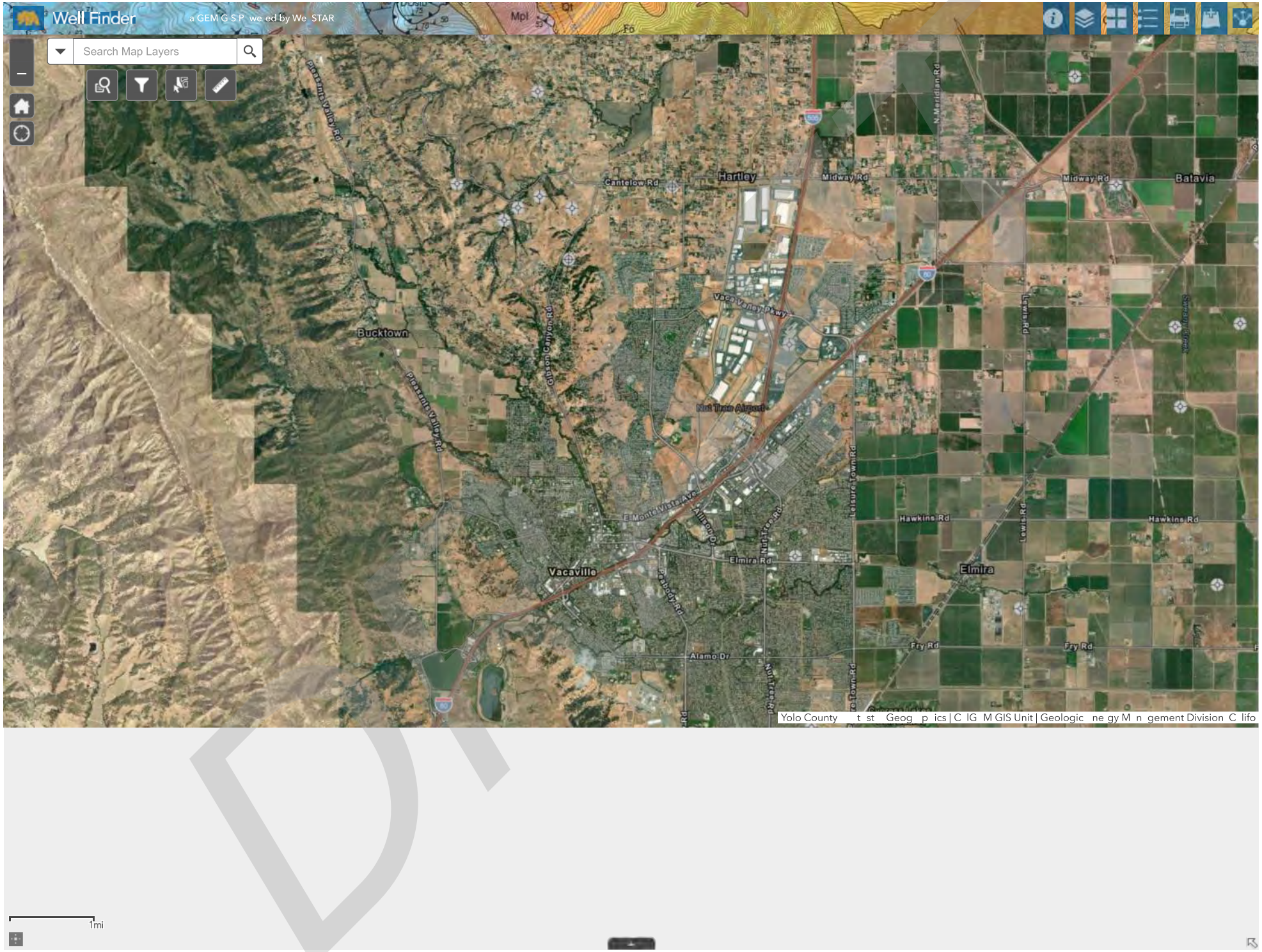
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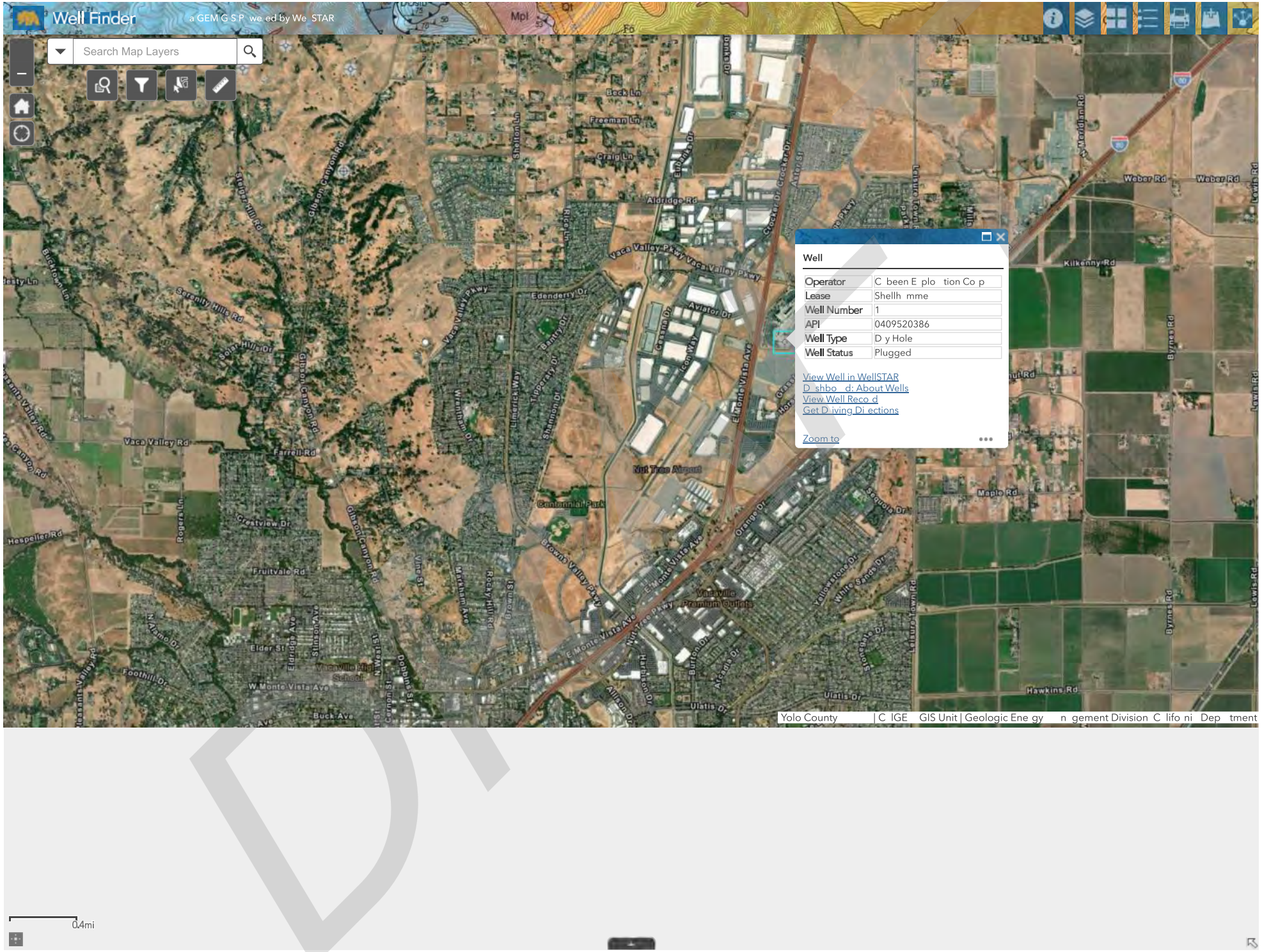
0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Community Development Department

City Limits
Street Centerline
Minor Arterials
Major Arterials
Freeway Ramps
Freeway
Zoning By Parcel
Downtown Neighborhood Low
Downtown Neighborhood Medium
Downtown Neighborhood High
Downtown Mixed-Use
Downtown Core
Downtown General Commercial
Downtown Public Facilities
Downtown Park and Recreation
Downtown Open Space
Historic Preservation
Agriculture
Agricultural Hillside
Mixed Use
Downtown Commercial
Highway Commercial
General Commercial
Neighborhood Commercial
Office Commercial
Service Commercial
Public Facilities
Parks & Recreation
Open Space
Business Park
Technology Park
Industrial Park
Industrial Service
Residential Rural
Residential Estates
Residential Low Density
Residential Low/Medium Density
Residential Medium Density
Residential Medium High Density
Residential High Density
Residential High Density Limited
Manufactured Housing Park
District Boundaries
Special Overlay District
Downtown Area
Freestanding Residential Buildings Permitted
Opportunity House Special Standards Overlay
Residential Urban High Density
Special Services Facilities
Vine St Area Special Standards Overlay District


Well Finder
a GEM G S P we ed by We STAR
Search Map Layers
Pleasants Valley Rd
Cantelow Rd
Hartley
Midway Rd
Batavia
N Meridian Rd
Vaca Valley Pkwy
Bucktown
Gibson Canyon Rd
Lewis Rd
Nut Tree Airport
Leisure Town Rd
El Monte Vista Ave
Allison Dr
Nut Tree Rd
Hawkins Rd
Elmira Rd
Vacaville
Peabody Rd
Elmira
Alamo Dr
Fry Rd
1mi
Yolo County t st Geog p ics | C IG M GIS Unit | Geologic ne gy M n gement Division C lifo


Well Finder
a GEM G S P we ed by We STAR
Search Map Layers
Well
Operator C been E plo tion Co p
Lease Shellh mme
Well Number 1
API 0409520386
Well Type D y Hole
Well Status Plugged
View Well in WellSTAR
D shbo d: About Wells
View Well Reco d
Get D iving Di ections
Zoom to
Yolo County | C IGE GIS Unit | Geologic Ene gy n gement Division C lifo ni Dep tment
0.4mi

Stefan Birardi

From: Cody Hess <CHess@ysaqmd.org>
Sent: Monday, March 18, 2024 5:47 PM
To: Stefan Birardi
Cc: PRA
Subject: RE: PRA/Information Request: Centennial Park

You don't often get email from chess@ysaqmd.org. Learn why this is important

External Email

Hello Stefan,

Your Public Records Act (PRA) request was received by the Yolo-Solano Air Quality Management District (District) on March 18, 2024 for your request that was received on 3/15/2024 for "active/inactive air quality permits, permits to operate, inspections, and violations" for the site location at Centennial Park. Under Section 6253(c) of the Government Code, the District must advise you within ten days of receiving your request whether the records you have requested are disclosable.

After reviewing your request, it appears that the District does not have records for the location specified in your request.

As there are no records available that pertain to your request, we consider this request closed. Please let me know if you have any questions regarding this request. If you would like to request District records in the future, please submit a new PRA request either by mail, fax (530-757-3670), or email (pra@ysaqmd.org).

Thank you and have a great day!

Best Regards,

Cody Hess - *Public Outreach Coordinator*
Yolo-Solano Air Quality Management District
chess@ysaqmd.org (530) 304-5833

From: Paul Hensleigh <PHensleigh@ysaqmd.org>
Sent: Monday, March 18, 2024 2:41 PM
To: Cody Hess <CHess@ysaqmd.org>
Cc: Gretchen Bennitt <GBennitt@ysaqmd.org>; Hope Welton <Hope.Welton@yolocounty.org>
Subject: RE: PRA/Information Request: Centennial Park

OK to proceed.

Thanks,
Paul

From: Cody Hess <CHess@ysaqmd.org>
Sent: Monday, March 18, 2024 12:43 PM

DRAFT

To: Paul Hensleigh <PHensleigh@ysaqmd.org>; Hope Welton <Hope.Welton@yolocounty.org>
Subject: FW: PRA/Information Request: Centennial Park

PRA request received.

NOTE: Did a search of the permit and document database and was **unable to recover anything** for Centennial Park (505-523 Browns Valley Pkwy)

Date Received:	03/14/2024
Location(s):	Centennial Park
Company Name:	n/a
Information requested:	"active/inactive air quality permits, permits to operate, inspections, and violations"
Requestor:	Stefan Birardi
Company:	Klein Felder

Cody Hess - *Public Outreach Coordinator*
Yolo-Solano Air Quality Management District
chess@ysaqmd.org (530) 304-5833

From: Stephanie Holliday <SHolliday@ysaqmd.org>
Sent: Thursday, March 14, 2024 3:43 PM
To: Cody Hess <CHess@ysaqmd.org>
Subject: FW: PRA/Information Request

Stephanie Holliday
Administrative Analyst
Yolo-Solano Air Quality Management District
1947 Galileo Ct., Ste. 103 | Davis, CA 95618
Direct (530)757-3657 | Main (530) 757-3650 | Fax (530) 757-3670
sholliday@ysaqmd.org www.ysaqmd.org
Facebook Twitter

Please consider the environment before printing this email

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From: Jotform <noreply@jotform.com>
Sent: Thursday, March 14, 2024 7:53 AM
To: PRA <pra@ysaqmd.org>
Subject: Re: PRA/Information Request

DRAFT

PRA/Information Request

PRA REQUEST:	Hello, we are seeking records related to active/inactive air quality permits, permits to operate, inspections, and violations.
If the record is for a facility which our agency regulates, provide the information you know about the facility: Company Name	Centennial Park
Facility location	APNs: 0129220050, 0129220040, 0129220030, and 0133070300
Date	01-01-1940
Date	03-14-2024
PRA - Indicate specifically which record(s) you are requesting a copy of:	Hello, we are seeking records related to active/inactive air quality permits, permits to operate, inspections, and violations.
If the information is for a facility which our agency regulates, provide the information you know about the facility: Company Name	Centennial Park
Facility location	APNs: 0129220050, 0129220040, 0129220030, and 0133070300
Date	01-01-1940
Date	03-14-2024
Name	Stefan Birardi
Address	770 First Avenue, Suite 400, San Diego, CA, 92101
Phone Number	(203) 578-5764
E-mail Address	sbirardi@kleinfelder.com

DRAFT

You can edit this submission and view all your submissions easily.

DRAFT



Sele t L ngu ge

Relate Info ation

Publ Re ords Request
Port l

ome (SupportHome spx?
sSess on D=174831398XEBXUAWBTKMRVDR RWHLSCQEQXWLBZS&lp=1)

FAQs (FAQs spx?
sSess on D=174831398XEBXUAWBTKMRVDR RWHLSCQEQXWLBZS)

(SupportHome spx?
sSess on D=174831398XEBXUAWBTKMRVDR RWHLSCQEQXWLBZS&lp=2)

(CustomerHome spx?
sSess on D=174831398XEBXUAWBTKMRVDR RWHLSCQEQXWLBZS)

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Publ Re ords Request

Logged in as: sb r rd @kle nfelder om

Re ords Request Det ls

Public records are documents or pieces of information that are not considered confidential and generally pertain to the conduct of government.

Are you seeking records from Community Development :*

- [x] Yes
- [ ] No

Type of Community Development Records:

- [ ] Property nform t on (Res dent l)
- [x] Property nform t on (Commer l)
- [x] Bu ld ng Perm ts
- [x] Bu ld ng V ol t ons
- [x] Cen n te e r O up n y
- [ ] Zon ng
- [x] Bu ld ng nspe t on Reports
- [ ] Sol r Perm ts

Are you seeking records from the Fire Department :*

- [x] Yes
- [ ] No

Type of Fire Records:

- [ ] Code Enfo ement V ol t ons (Res dent l)
- [x] Code Enfor ement V ol t ons (Commer l)
- [ ] F re Code V ol t ons (Res dent l)
- [x] F re Code V ol t ons (Commer l)
- [x] F re nspe t on Reports
- [x] F re Reports

Street Address:

500-523 Browns V lley P rkw y

Enter C ty of V lle Street Address/Property Lo t on

APN:

0129220050, 0129220040, 0129220030, nd 0133070300

Enter P r el Number f known

Describe the Record(s) Requested:*

ello, we re look ng or en ronment l do uments (en ronment l reports, w ter wells, sept , h z rdous w ste h ndl ng/d spos l, ol t ons, sp lls/rele ses, USTs/ASTs, nspe t ons) or the our p r els o l nd th t ompr se Centenn l P rk Add t on lly, we re seek ng n orm t on rel ted to the ormer l ndfill th t oper ted t the s te

Ple se be spe fi w th your re ords request to n rrow our se r h nd respond to you qu kly nd effi ently

Date/Date Range:

All l ble

Preferred Method to Receive Records:*

Ele tron Customer Port l

Powered by GovQA

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Please note not all l do ments are ava la le n ele tron format. If the do ment(s) req ested are not ava la le ele tron ally, we w ll make them ava la le for ns e t on or y a er o y n a ordan e w th the P l Re ords Law.

I understand that the City of Vacaville has 10 days to respond to my request or advise of when a response is to be expected. I also acknowledge that there maybe fees associated with producing this request and requested items will not be turned over until all fees are paid.

I have read and agree to the above statement:*

☑ Yes

File Attachment(s)

SE ECT FI E or Dro file here

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ATTACHMENT C

SUGNET & ASSOCIATES

ENVIRONMENTAL CONSULTANTS

2260 DOUGLAS BOULEVARD, SUITE 160 · TELEPHONE (916) 782-9100 · FACSIMILE (916) 782-9134
ROSEVILLE, CALIFORNIA 95661

May 19, 1992

Mr. David Hubbell
Planning Project Manager
City of Vacaville
650 Merchant Street
Vacaville, CA 95688

Re: *150 ± Acre Vacaville Park Property, Solano County*

Dear Mr. Hubbell:

At your request, a wetland assessment and reconnaissance-level special status species survey were conducted in May 1992 for the 150± acre Vacaville Park property, located in Solano County, California. Baseline data from the following sources were reviewed prior to field survey: 300 scale black and white aerial photography from 1989, 1:2400 USGS 7.5 minute Allendale and Elmira quadrangles; Soil Conservation Service maps for Solano County; and the California Department of Fish and Game's Natural Diversity Data Base (NDDB) printout for the above USGS Quadrangles (Appendix I). Subsequent to this review, a field reconnaissance of the property was conducted to ascertain the phenology of dominant plant species, assess predominant drainage patterns, evaluate soil morphology and drainage class, ground-truth aerial photos and determine the presence of special status species. Potential special status species that could occur on the project due to presence of suitable habitat coincident with known geographic ranges are listed in Table 1.

Biologists walked the entire site on May 12, 1992. Wetland and special status species data were collected for input onto a 1"=200' scale base map.

While the Vacaville Park site consists largely of highly disturbed annual grassland and a historical sewer treatment plant, approximately 6.63± acres of waters of the United States and wetlands, potentially subject to Army Corps Section 404 jurisdiction, were identified on-site during the May, 1992 assessment. An acreage summary is provided in Table 2. The locations of jurisdictional and potentially jurisdictional wetlands and waters are depicted on the 1"=200' scale, Vacaville Park Preliminary Biological Constraint and Wetland Assessment Map (enclosed).

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Table 1. Special Status Species in the Vacaville Park Project Vicinity[1]

Flora:	Legal Status (State /Federal/CNPS)	Habitat
Contra Costa goldfields (*Lasthenia conjugens*)	-/C1/1B	vernal pool/ seasonal wetland
Dwarf downingia (*Downingia humilis*)	-/C3c/1B	vernal pool/ seasonal wetland
Bearded allocarya (*Allocarya hystriculus*)	-/C2/1B	vernal pool/ seasonal wetland
Sanford's arrowhead (*Sagittaria sansfordii*)	-/C2/3	freshwater marsh
Adobe lily (*Fritillaria pluriflora*)	-/C2/1B	chaparral, cismontane woodland, valley/foothill grassland (adobe soils)
Fauna:		
Vernal pool fairy shrimp (*Branchinecta lynchi*)	-/C1Δ	vernal pool/ seasonal wetland
Conservancy fairy shrimp (*Branchinecta conservatio*)	-/C1Δ	vernal pool/ seasonal wetland
California linderiella (*Linderiella occidentalis*)	-/C1Δ	vernal pool/ seasonal wetland
Tadpole shrimp (*Lepidurus packardi*)	-/1RΔ	vernal pool/ seasonal wetland
Black-shouldered kite (*Elanus caeruleus*)	*/1	riparian/woodland (nest); savannah/grassland (forage)
Swainson's hawk (*Buteo swainsoni*)	ST	open grassland
Northern harrier (*Circus cyaneus*)	CSC/-	marsh/grassland
Burrowing owl (*Athene cunicularia*)	CSC/-	open grassland (rodent burrows)
Tricolored blackbird (*Agelaius tricolor*) (nesting colony)	-/C2	nesting: marsh/riparian scrub
Loggerhead shrike (*Lanius ludovicianis*)	-/C2	grassland/savannah
• Western pond turtle (*Clemmys marmorata*)	CSC/C2	streams/ponds

[1]Based on data obtained from the California Department of Fish and Game's Natural Diversity Data Base (NDDB) and lists from the California Native Plant Society (CNPS) and the U.S. Fish and Wildlife Service.

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C1 -Enough data on file to support federal listing.
C2 -Category 2 Candidate for Federal listing (Taxa for which existing information indicates may warrant listing, but for which substantial biological information to support a proposed rule is lacking).
C3C -Too widespread or not threatened at this time.
ST -State listed, threatened.
CSC -California Department Fish and Game "Species of Special Concern"
1B -Rare and endangered in California and elsewhere. (CNPS)
3 -Rare but not endangered (CNPS).

* Falls into one or more of the following categories:
- Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines.
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range.
- Population(s) in California that may be peripheral to the major portion of a taxon's range, but which are threatened with extirpation within California.
- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands , riparian, old growth forests, desert aquatic systems, native grasslands).

• Habitat and/or individual observed during survey.
Δ Currently proposed for Federally listed - endangered

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Table 2. Preliminary Estimate of Army Corps Jurisdictional Acreage

Classification	Acreage
Seasonal Wetland	0.61
Seasonal Marsh (potentially jurisdictional)	4.80
Intermittent Drainage	1.22
Total:	6.63

The predominant wetland features on site are the seasonal marsh areas associated with basins historically used for sewer treatment. These seasonal marsh mosaics occupy approximately 4.80 acres. These man-induced wetlands, dominated by ryegrass (*Lolium multiflorum*) may or may not be considered Army Corps jurisdictional. The Corps makes such determinations on a case by case basis. Other on-site wetland features include approximately 0.61 acres of seasonal wetland and 1.22 acres of intermittent drainages. Portions of the southern-most intermittent drainage are lined with riparian scrub habitat composed predominately of blackberry (*Rubus* sp.) and various willows (*Salix* sp.). This habitat type often falls under California Department of Fish and Game jurisdiction.

Besides jurisdictional waters and wetlands present on-site, other environmental constraints include the presence of special status species and habitat. Table 1 lists special status plant and wildlife species which could potentially occur on the Vacaville Park project site due to the presence of suitable habitat coincident with known geographic ranges. A discussion of potential special status species follows:

No special status plant species were encountered during the May 1992 survey. Contra Costa goldfields (*Lasthenia conjugens*), Bearded allocarya (*Allocarya hystriculus*), and Dwarf downingia (*Downingia humilis*), could potentially occur in the site's northern-most seasonal wetland, though none of these species were encountered during the survey.

Wetter portions of on-site intermittent drainages could potentially support Sanford's Arrowhead (*Sagittaria sansfordii*), a C2 Candidate for federal listing. Surveys for this species should be conducted during its flowering period in May and June. None were observed during the may 1992 survey though these results are inconclusive. A more thorough survey for this species is recommended.

Adobe lily (*Fritillaria pluriflora*), could potentially occur in the annual grassland on site due to the presence of clay soils. However, it is unlikely to occur due to the site's historic disturbance and predominance of introduced grasses and weeds.

The only special status wildlife species observed during the survey was western pond turtle (*Clemmys marmorata*). Two turtles were observed in the northern central intermittent drainage that traverses the site west to east. Western pond turtles are a California Department of Fish and Game (CDFG) species of special concern (CSC). These turtles most likely reside off site in the Putah South Canal during dryer months when water is no

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longer present in the intermittent drainage system. However, urban runoff may provide an ample water supply in the western portions of the drainage year round.

The northern most seasonal wetland could potentially support special status crustaceans such as fairy shrimp (*Branchinecta* sp.), California linderiella (*Linderiella occidentalis*) and the vernal pool tadpole shrimp (*Lepidurus packardi*). These previously federal C1. candidates have recently been petitioned for a federal endangered listing. This seasonal wetland should be sampled in between February and April to determine whether or not these crustaceans are present.

The entire Vacaville park site which is composed predominately of disturbed annual grassland, represents foraging habitat for various raptor species. Special status raptors which may utilize the site include burrowing owl (*Athene cunicularia*), black shouldered kite (*Elanus caeruleus*), Northern harrier (*Elanus caeruleus*) and Swainson's hawk (*Buteo swainsoni*).

Burrowing owls, a CDFG species of special concern, are subterranean nesters which utilize the burrows of mammals such as California ground squirrels. While suitable habitat occurs throughout much of the site, no burrowing owls were observed during the May 1992 survey. This species allows for surveys throughout the year and further surveys are recommended. Nest sites should be avoided if they are found to occur on site.

Black shouldered kites may also forage in the annual grassland on site. This species nests in trees adjacent to suitable foraging areas. Few nesting sites are available on site, i.e., one cottonwood tree in the southern portion of the site. No evidence of nesting was found during the May 1992 survey. The majority of trees on site are too small to serve as suitable nest sites.

Another special status raptor species that may occur onsite is the Northern harrier a CDFG species of special concern. It is associated with marsh and grassland habitats. Both suitable foraging and nesting habitat occurs throughout the site. Nesting occurs from April to mid May in grassland areas. While no harriers were observed during the preliminary survey, additional surveys for nesting harriers are recommended.

Although the NDDB does not list occurrence of Swainson's hawk for the Vacaville Park property this bird is known to forage in open grassland and agricultural habitats in the region and nests are known within the vicinity of the project site. Since the hawk may forage at least ten miles out from its nest, any suitable foraging cover including alfalfa, grassland, and most row crops within a 10 mile radius of a known nest is considered Swainson's hawk habitat. The Vacaville Park property is within 10 miles of known nests. While no hawks were observed during the survey; loss of suitable foraging habitat may require mitigation.

Current Department of Fish and game mitigation guidelines include no net loss of foraging and nesting habitat. Impacts are to be mitigated at a minimum of ratio of 1:1 through development of new optimal foraging habitat including alfalfa and row crops such as

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tomatoes, oats, wheat, barley, and sugar beets. Future mitigation ratios may be as high as 3:1.

Loggerhead shrike (*Lanius ludovicianis*), a C2 candidate for federal listing may also occur on site. This species is relatively widespread in grassland areas throughout the state. It was recently designated a federal C2 candidate species due to habitat decline. Nesting sites should be avoided if they are found to occur on site.

Suitable habitat for tricolored blackbird (*Agelaius tricolor*), was also identified during the May 1992 preliminary survey. Tricolored blackbird is a Category 2 Candidate for federal listing and has recently been petitioned for "state endangered listing". It's preferred nesting habitat is freshwater marsh but it may also nest in riparian areas among other nesting substrates. Foraging habitat includes wetlands and adjacent grasslands. Both suitable foraging and nesting habitats occur on-site particularly along the southern most intermittent drainage. No tricolored blackbirds were observed during the survey which was conducted well within their breeding season. Should they be discovered to nest on-site, impacts to nesting habitat may require mitigation. Mitigation may include habitat development and monitoring plans.

Of the fourteen other special status wildlife species considered potential for the site, only one was observed. Two western pond turtles, a CDFG species of special concern, were observed in the north-central intermittent drainage on site. No other special status wildlife species were observed during the May survey, though more detailed surveys are recommended.

Included herewith is a Preliminary Biological Constraint and Wetland Assessment map for the Vacaville Park property. It identifies Army Corps jurisdictional areas and potential Swainson's hawk foraging habitat. Please feel free to contact me should you have any questions or need additional information.

Sincerely,

Peter Balfour
Associate Biologist

Enclosure

PB/sd

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APPENDIX A

CALIFORNIA DEPARTMENT OF FISH AND GAME NDDB PRINTOUT

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An Archaeological Study of Centennial Park Browns Valley Parkway, Vacaville, Solano County, California

prepared for

City of Vacaville
650 Merchant Street
Vacaville, California 95688

prepared by

Seana L. S. Gause

Anthropological Studies Center
Sonoma State University Academic Foundation, Inc.
1801 E. Cotati Avenue, Building 29
Rohnert Park, California 94928
ph: (707) 664-2381 fx: (707) 664-4155

This project was completed under the supervision of Dr. Adrian Praetzellis (Member, Society of Professional Archeologists), Director, Anthropological Studies Center

January 1997

Project 50001 3/97

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An Archaeological Study of Centennial Park, Vacaville, Solano County, California

INTRODUCTION

An archaeological study was conducted of the undeveloped portions of Centennial Park, comprising approximately 76 acres, at the request of Wendy Thomas of the City of Vacaville. The purposes of the study, in accordance with the California Environmental Quality Act (CEQA), were (1) to identify and record archaeological and historical sites within the study area; (2) to make preliminary evaluations of their significance; and (3) to recommend procedures for avoidance or mitigation of adverse effects to potentially important cultural resources.

Background research indicated that there had been one previous literature review of the land in question and that no known archaeological or historical resources had been identified in or adjacent to the study area. The consulting archaeologist who performed the literature review recommended that additional study be done prior to further development of the area. As a result of the current study, no archaeological sites were identified, nor were any historical architectural resources identified. There is the possibility, however, that subsurface archaeological deposits are present; see the conclusion of this report for details.

STUDY-AREA LOCATION AND DESCRIPTION

The 76-acre study area is located about 1/2 mile northeast of the intersection of Browns Valley Parkway and Monte Vista Avenue in the city of Vacaville, Solano County, California The property is located within the Los Putos land grant, as depicted on the Elmira, California, and Allendale, California, 7.5'-series topographic quadrangles (1953, photorevised 1968; see map).

The park is located at the western edge of the Central Valley, just east of the English Hills at the foot of a small ridge; elevation of the park is about 150 feet above mean sea level. The soils are light grey brown to tan brown alluvial deposits, containing approximately 45% pea gravels. There are two watercourses within the project area, both of which are channelized and empty into Putah South Canal, outside the park area.

The natural vegetation of the project and surrounding area is California Prairie, a "dense to somewhat open, medium tall buchgrass community with many forbs" (Küchler 1978:23). Within the project area, vegetation is sparse to dense, depending on the amount of landscaping done for development of the park. The undeveloped areas of the park support introduced grasses and forbs. At the south end of the project area, near the channelized creek, riparian trees such as willow, alder, and California Bay are present.

The project area was used previously as a sewage-disposal and a land-fill site. The park has been partially developed, with four baseball diamonds now located where the sewage-disposal pond once was, and a parking lot scheduled to be put over the area previously used for land fill.

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STUDY METHODS

The archaeological study involved two steps: background research, and an on-foot field survey. Prior to the field survey, the author conducted research to determine whether any recorded or otherwise known archaeological or historical resources were located within the study area and to assess the likelihood of unrecorded resources based on the distribution and environmental settings of nearby known sites. This research consisted of (1) a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System; and (2) a review of literature and maps on file at the Anthropological Studies Center, Sonoma State University (see References Consulted). Affiliated with the State Office of Historic Preservation, the NWIC is the official state repository for records and reports of prehistoric and historical archaeology and the built environment for an 18-county service area, including Solano County.

The records search consisted of reviewing historical maps (General Land Office 1865; Henning 1872; and C.F. Webber & Company 1914) and modern inventories, including the *National Register of Historic Places, California Inventory of Historic Resources, California Historical Landmarks,* and *California Points of Historical Interest* listings. The records search indicated that there were no recorded archaeological or historical resources within the study area, nor had the property been surveyed previously for cultural resources. One literature review had been performed by David Chavez, consulting archaeologist, in December 1981. There were no recorded archaeological sites within a 1-mile radius of the project area. Farming and ranching appear to have been the historical use of the study area in the 19th century; no residences are indicated on historic documents.

Ethnographic literature (Johnson 1978; Kroeber 1925) indicates that at the time of historic contact the study area was located within the territory of a Patwin-speaking tribelet. Johnson (1978:350) indicates that *Ululato*, a Patwin village known ethnographically, would have been the closest historically documented site to the project area. The State of California Native American Heritage Commission (NAHC) was contacted and asked to review the Sacred Lands file for cultural resources; Debbie Plias-Treadway of the NAHC found that there were none recorded within the project area.

FIELD SURVEY METHODS

The study area was field-surveyed by the author and Maria Ribeiro of the Anthropological Studies Center on 10 January 1997. The survey was conducted on all areas by walking 10- to 35-meter-wide transects and examining the ground surface for archaeological remains. The areas scheduled for a new access road and detention basins for wetland mitigation were thoroughly examined using 10-meter wide transects. The entire perimeter of the study area was also directly examined. Ground visibility ranged from poor to fair, depending on the vegetative ground cover. Rodent backdirt piles, areas of recent ground disturbance, and drainage cutbanks were examined for indicators of subsurface archaeological sites. Trowels were used periodically to clear vegetation from the ground. Standing goundwater and saturated soils made visibility difficult in some areas.

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STUDY RESULTS AND RECOMMENDATIONS

Background research indicated that the study area had no previously recorded cultural resources. No new cultural resources were recorded as a result of the current study. Because the study area is located in an area of considerable soil deposition, there is the possibility that buried archaeological materials are present below the current ground surface. If ground-disturbing activities are to occur 6 feet or more below surface, archaeological deposits may be encountered. In the event that buried archaeological materials are unearthed, it is recommended that work in the immediate vicinity halt and a qualified archaeologist be contacted to evaluate the finds and make recommendations. Prehistoric materials might include flaked-stone tools (projectile points, knives, scraping tools) or obsidian or chert toolmaking debris; culturally darkened soil ("midden") containing heat-altered rock, shellfish remains and cultural materials; and stone milling equipment (mortars, pestles, handstones, and millingstones). Historical archaeological materials might include stone footings or walls; building remains with square nails; backfilled wells or privies; and other deposits of glass, metal, and/or ceramic refuse.

It is important to note that Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human burial. If human burials are encountered, work should halt in that vicinity and the County Coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of such identification. Appendix K of the California Environmental Quality Act details steps to be taken if human burials are of Native American origin.

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1996b *National Register of Historic Places Index of Determined Eligible Properties* (computer listing for 1966 through 5 February 1996). United States Department of the Interior, Washington, D.C. On file, Northwest Information Center, Historical Resources Information System, Sonoma State University, Rohnert Park, California.

United States Geological Survey

1953 *Allendale, Calif.*, 1:24,000 topographic quadrangle. Photorevised 1968.

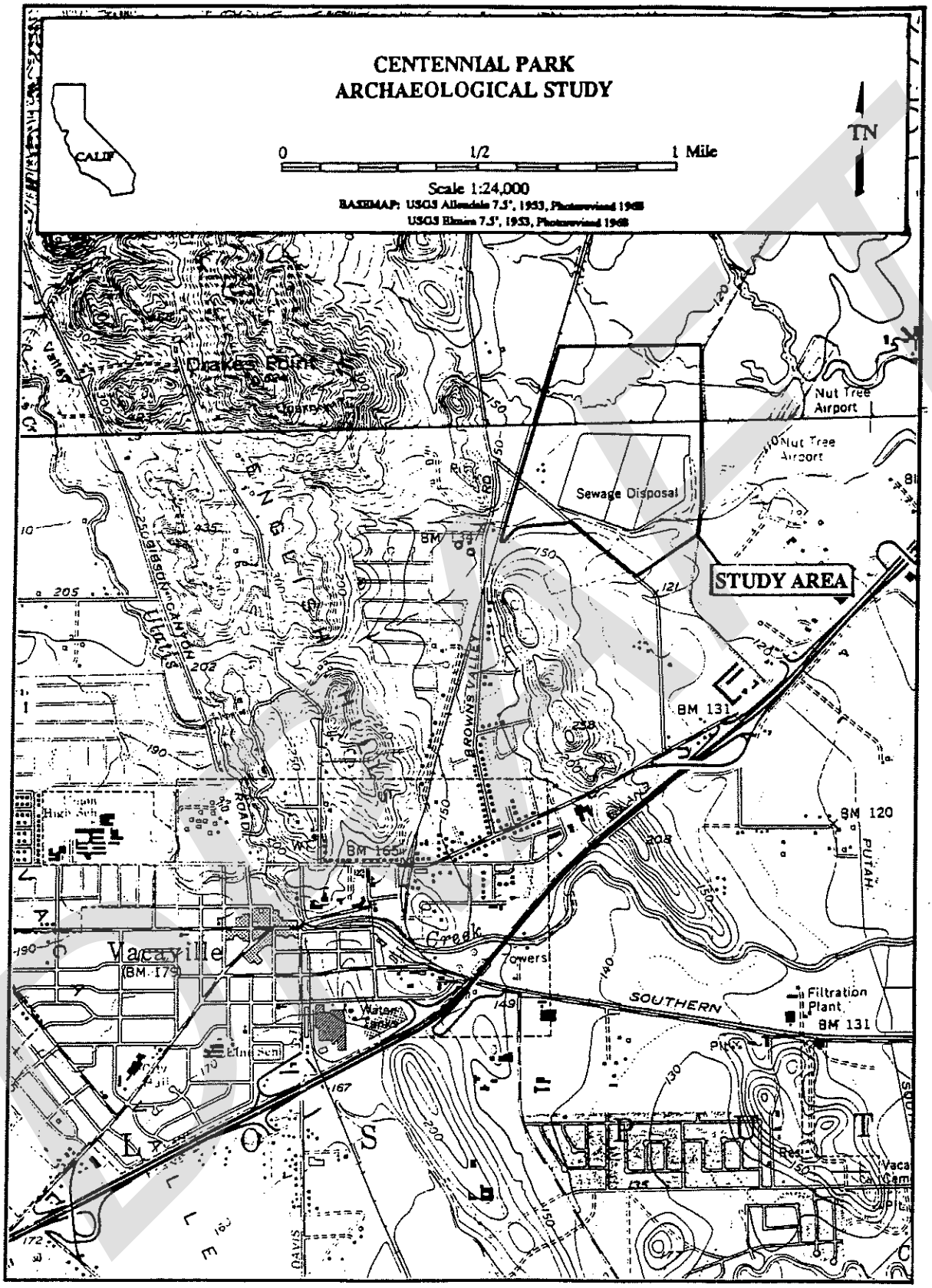
1953 *Elmira, Calif.*, 1:24,000 topographic quadrangle. Photorevised 1968.

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Weber, C.F.

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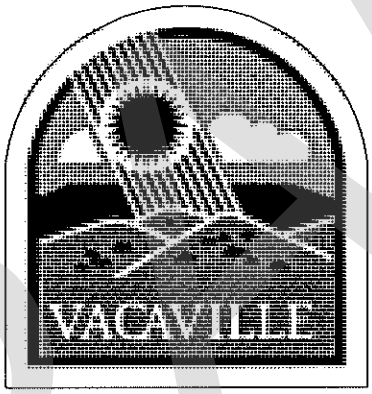

CENTENNIAL PARK
ARCHAEOLOGICAL STUDY
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1 Mile
Scale 1:24,000
BASEMAP: USGS Allendale 7.5', 1953, Photorevised 1968
USGS Elmira 7.5', 1953, Photorevised 1968
TN
Drake's Point
Nut Tree Airport
Sewage Disposal
STUDY AREA
BM 131
BM 120
BM 166
Vacaville
(BM 179)
Water Tanks
Filtration Plant
BM 131
SOUTHERN
PUTAH
BROWNS VALLEY
ULATIS
GIBSON CANYON
DAVIS

TRAFFIC STUDY REPORT FOR

CENTENNIAL PARK
MASTER PLAN DATED 12/24/96

LOCATED IN CITY OF VACAVILLE

FEBRUARY 1997



ESTABLISHED 1850

650 Merchant Street
Vacaville, CA 95688

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Prepared by:
City of Vacaville
Department of Public Works, Traffic Division
Gian Aggarwal, Traffic Engineer
Osgood Hilton III, Assistant Civil Engineer

EXECUTIVE SUMMARY

This study was accomplished to provide analysis of the traffic impacts and mitigation measures in accordance with the California Environmental Quality Act (CEQA), and provide a technical basis to determine conformance with the General Plan Transportation Policies and the Traffic Impact Mitigation Ordinance. The proposed facilities are shown on a Master Plan for Centennial Park dated 12/24/96. This study documents existing counts 9/96, and model conditions for Existing Conditions 1/97, Existing Plus Approved Projects and the Year 2010, horizon year of the General Plan. The project for the purpose of this study is defined as the development of the recreation improvements beyond those existing. Proposed facilities include private development of 76,000 square feet of gymnasium housing two (2) soccer fields, five (5) basketball courts and associated uses. Also proposed are outdoor facilities including nine (9) soccer fields, two (2) practice soccer fields, a sand volleyball/soccer court, office space for Youth Soccer League (~1,000 square feet), playground equipment, group picnic facilities, and a nine-hole golf course. Proposed improvements provide 418 parking spaces in addition to the 200 existing and planned, for a total of 618 parking spaces.

The 1990 calibration of the Citywide MINUTP Traffic Model was used to develop the traffic volumes and turning movement counts for each condition. The following six (6) intersections were studied: Browns Valley Parkway/ Brown Street, Browns Valley Parkway/East Monte Vista Avenue, Allison Drive/East Monte Vista Avenue, Browns Valley Parkway/East Monte Vista, Browns Valley Parkway/Allison Drive/Centennial Park, and Browns Valley Parkway/North Centennial Park Driveway.

The 1990 Vacaville General Plan and the Traffic Mitigation Policy establish the basis for determining acceptable levels of service (LOS). An impact is defined as significant environmental effect when an affected intersection will operate at LOS E, or worse (V/C>0.90). An affected intersection is one where the change in Volume to Capacity Ratio (V/C) is greater than two hundredths (<0.02).General Plan Policy 6.1 G.2 documents conditions for accepting LOS D.

Based on these policies this study documents that potentially significant and significant traffic impacts exist <u>without</u> the project in each of the model conditions at Allison/East Monte Vista; at Browns Valley/Brown for Existing Plus Approved Projects and Year 2010; and at Browns Valley /East Monte Vista and Browns Valley /North Centennial Driveway in the Year 2010. These impacts are due to cumulative impacts and improvements are included in the transportation portion of the Development Impact Fee Program, or can be accomplished as traffic striping and signal modifications by City forces. By administering the Development Impact Fee Program and traffic striping and signal modifications all potentially significant and significant impacts of cumulative impacts are mitigated to LOS C, or better, with the exception of Allison/East Monte Vista and Browns Valley/ East Monte Vista operating at LOS D in the Year 2010. Allison/East Monte Vista is discussed in the with project condition. No further improvements at Browns Valley/East Monte Vista are feasible or practical since East Monte Vista is so close to I-80. City Council could accept LOS D at Browns Valley/East Monte Vista with findings consistent with General Plan Policy 6.1-G2, or limit future projects impacting this intersection.

<u>With</u> development of the Centennial Park Master Plan very similar potentially significant and significant impacts occur in each of the study conditions, with two (2) exceptions. Allison/East Monte Vista in the Existing Plus Approved Project condition with the project causes LOS to change from D (V/C=0.88) to E (V/C=0.91), and in the Year 2010 Browns Valley/Allison reaches the threshold of LOS C (V/C=0.80). At Allison/East Monte Vista the same mitigation measure, revising one westbound through lane to a share through/left turn lane allows this intersection to operate at LOS D with and without the project in the Year 2010. Further widening would mitigate this intersection to LOS C with or without the project, but it would significantly impact the commercial development existing on the Northeast, Southeast and Northwest corners. City Council could accept LOS D at Allison/East Monte Vista with findings consistent with General Plan Policy 6.1-G2, direct that future widening be included in future Development Impact Fee update, or limit future projects impacting this intersection. At Browns Valley/Brown adding a southbound right turn to Browns Valley Parkway with the Development Impact Fee project would mitigate this intersection to LOS B (V/C=0.67) with the project.

The impacts documented are mitigated by planned improvements that are part of the Development Impact Fee Program and traffic stripping and signal revisions for impacts causes by cumulative developments. Development of the Centennial Park Master Plan is found to be consistent with the General Plan and Traffic Mitigation Ordinance, causing no significant impacts beyond those planned and to be administered by the City.

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CHAPTER 1 INTRODUCTION

1.1 SCOPE OF STUDY

This study was accomplished to evaluate the expected traffic impacts resulting from the development of recreational improvements proposed on City owned property known as Centennial Park. Traffic analysis will define existing traffic volumes and conditions, and use the Vacaville Citywide MINUTP traffic model to develop Existing Condition, Existing Plus Approved Projects, and Year 2010 conditions. The addition of traffic generated as a result of the development of Centennial Park was analyzed for each of these conditions. The City's Traffic Mitigation Ordinance requires an analysis of peak hour conditions, the PM peak hour between 4:00 and 6:00 PM. The City's traffic model addresses peak hour conditions for typical workdays (Monday through Friday). The analysis does not include special events at the park that may occur on an infrequent basis, typically on weekends. It should be noted these scheduled events with the potential for peak trip generation would occur during times when adjacent traffic is not at peak volume, and would be required to provide traffic control to handle park ingress and egress.

The purpose of this study to: a) Analyze the traffic impacts an mitigation measures in accordance with the California Environmental Quality Act, and b) provide the technical basis to determine conformance with General Plan Transportation Policies and the Traffic Impact Mitigation Ordinance..

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CHAPTER 2 PROJECT LOCATION & DESCRIPTION

2.1 PROJECT LOCATION

The Centennial Park Master Plan is situated along the east side of Browns Valley Parkway, north of East Monte Vista Avenue and south of Brown Street (See Figure 1). The site is bound by Southern Pacific right-of-way of on the West and Putah South Canal on the East. The northerly boundary of the park site is the southerly boundary of the Kilpatrick Power Industrial Park Policy Plan Area. The southerly boundary is Browns Valley Parkway frontage and the south end of the Solano County Airport.

The park site is split north south by a zoning boundary between A-20 (Agricultural) to the south, and IP-PP (Industrial Park - Policy Plan) to the north of this line. General and Highway Commercial Zoning exist to the south of the park site. Across the railroad right-of-way to the west is residential zoning and across Putah South Canal to the east of the site is Industrial Park, Airport and Highway Commercial zoning. Part of the project includes a proposed rezoning the IP-PP portion of the City site to A-20 (Agricultural) Zoning and a General Plan Amendment from Industrial to Park.

2.2 PROJECT DESCRIPTION

This project consists of the developing recreational improvements as outlined on the Centennial Park Master Plan dated 12/24/96. Figure 2 depicts the park with all proposed facilities. For the purposes of this study a buildout of this Master Plan beyond the existing and planned improvements is considered to be the project.

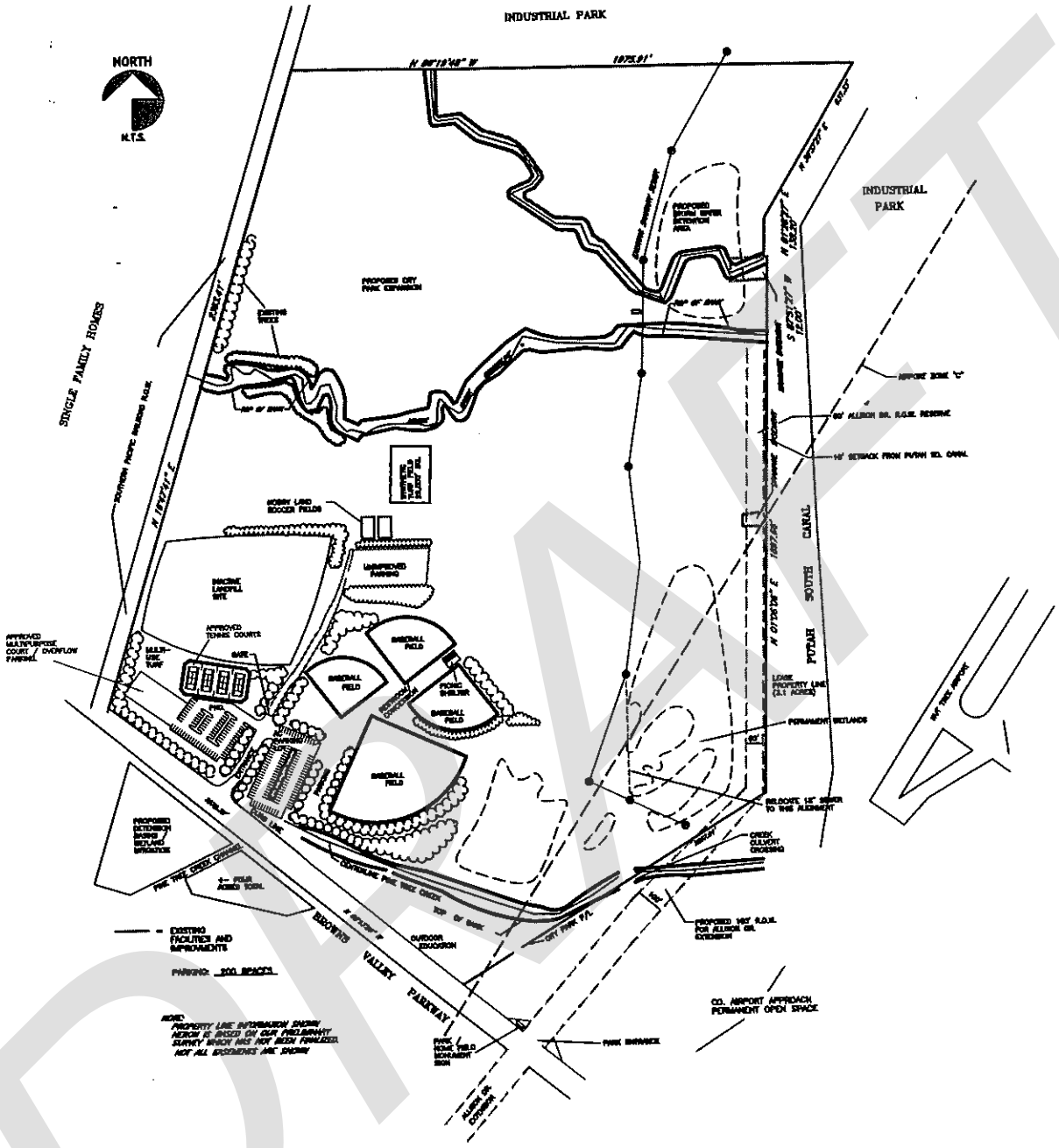
Existing improvements of the project site consists of four (4) baseball fields with a restroom and concession building, two (2) small synthetic turf soccer fields for practice and training, one (1) synthetic turf soccer field, and 102 parking spaces. The development of four (4) tennis courts with an associated parking lot providing 88 parking stalls, is a planned improvement, currently in design and scheduled for construction in Spring 1997.

Proposed improvements included private development of "Homefield Gymnasium", consisting of a 68,000 square foot gymnasium, with and additional 8,200 square feet of associated uses. The gymnasium will provide indoor facilities for two (2) soccer fields, and five (5) basketball courts (four full courts and one half court). These court areas could be used for volleyball also. No fixed spectator seating is proposed in the gymnasium. The associated uses include office, locker room, childcare, food preparation and counter, and retail space. This facility is expected to have 15 employees, and would be operated privately under a long term ground lease with the City of Vacaville.

Buildout of the Master Plan includes public development of outdoor recreation facilities. These outdoor facilities include nine (9) full size soccer fields, two (2) small synthetic soccer fields for practice and training, one (1) beach volleyball/beach soccer field, modular office space for Vacaville Youth Soccer League (less than 1,000 square feet), playground equipment, group picnic facilities, and 418 parking spaces. The northerly 5 acres of the site are designed for the passive recreational uses of an undetermined nature. For the purposes of this analysis, it is assumed that it would be developed as a 9-Hole executive golf course and associated parking facilities, since that would be the use with the greatest anticipated traffic impact.

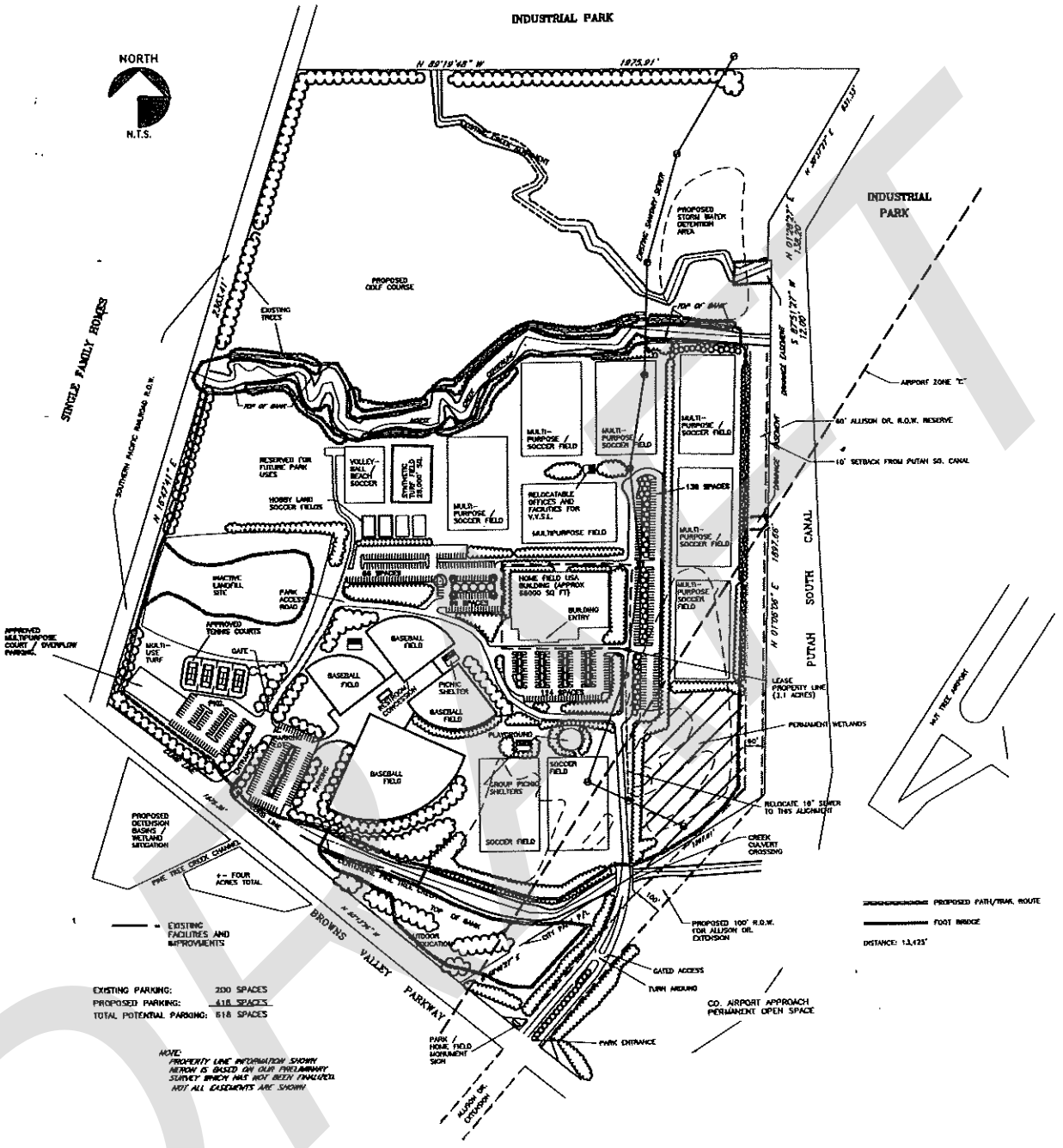
At buildout, the master plan provides parking for 618 vehicles: 102 spaces existing with baseball fields, 88 spaces planned with tennis courts, and 418 spaces proposed with balance of master plan.

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CITY OF VACAVILLE PUBLIC WORKS TRAFFIC ENGENEERING	FIGURE 1 CENTENNIAL PARK MASTER PLAN
DATE: 1/30/97 APPROVED BY: O.H.	Existing Improvements



CITY OF VACAVILLE
PUBLIC WORKS
TRAFFIC ENGENEERING

DATE: 1/30/97 APPROVED BY: O.H.

FIGURE 2
CENTENNIAL PARK MASTER PLAN

Master Plan Buildout

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2.3 ROADWAY NETWORK - EXISTING & PLANNED IMPROVEMENTS

The roadway network serving this area is well developed. The park site fronts Browns Valley Parkway, a major arterial. Browns Valley Parkway provides north- south link, to Brown Street and to Vaca Valley Parkway, and to the south to East Monte Vista Avenue. East Monte Vista Avenue, a major arterial, provides access from the East and West. Near completion, Allison Drive, a major arterial, provides access to and from the South, and replaces the two lane East Monte Vista overcrossing with a six lane Allison Drive Overcrossing. The Allison Drive Overcrossing greatly increases traffic capacity across Interstate 80. Figures 3 -5 document the roadway networks for each of the following conditions: Existing 9/96, Existing 1/97 & Existing plus Approved Projects and Year 2010.

The extension of Allison Drive from East Mount Vista to Browns Valley is currently at a 95% design stage and construction is planned to commence this Spring or Summer. This planned extension will create a four-legged intersection with a proposed Centennial Park entrance. The park entrance is also the location for the future extension of Allison Drive. See the following section for a discussion of the extension of Allison Drive through the park.

Consistent with the General Plan, the transportation portion of the Development Impact Fee Program includes widening Browns Valley Parkway to 4 lanes (two in each direction) south of Brown Street. This improvement is currently scheduled for the Year 2007.

For the purpose of traffic model analysis of the Existing Conditions, Allison Drive Overcrossing and the Northerly extension of Allison Drive are considered to be complete since these improvements will be completed prior to the construction of proposed Centennial Park recreational improvements. For the Year 2010 condition widening of Browns Valley Parkway to four (4) lanes is tested and shown as a mitigation measure to be provided through the Development Fee Program.

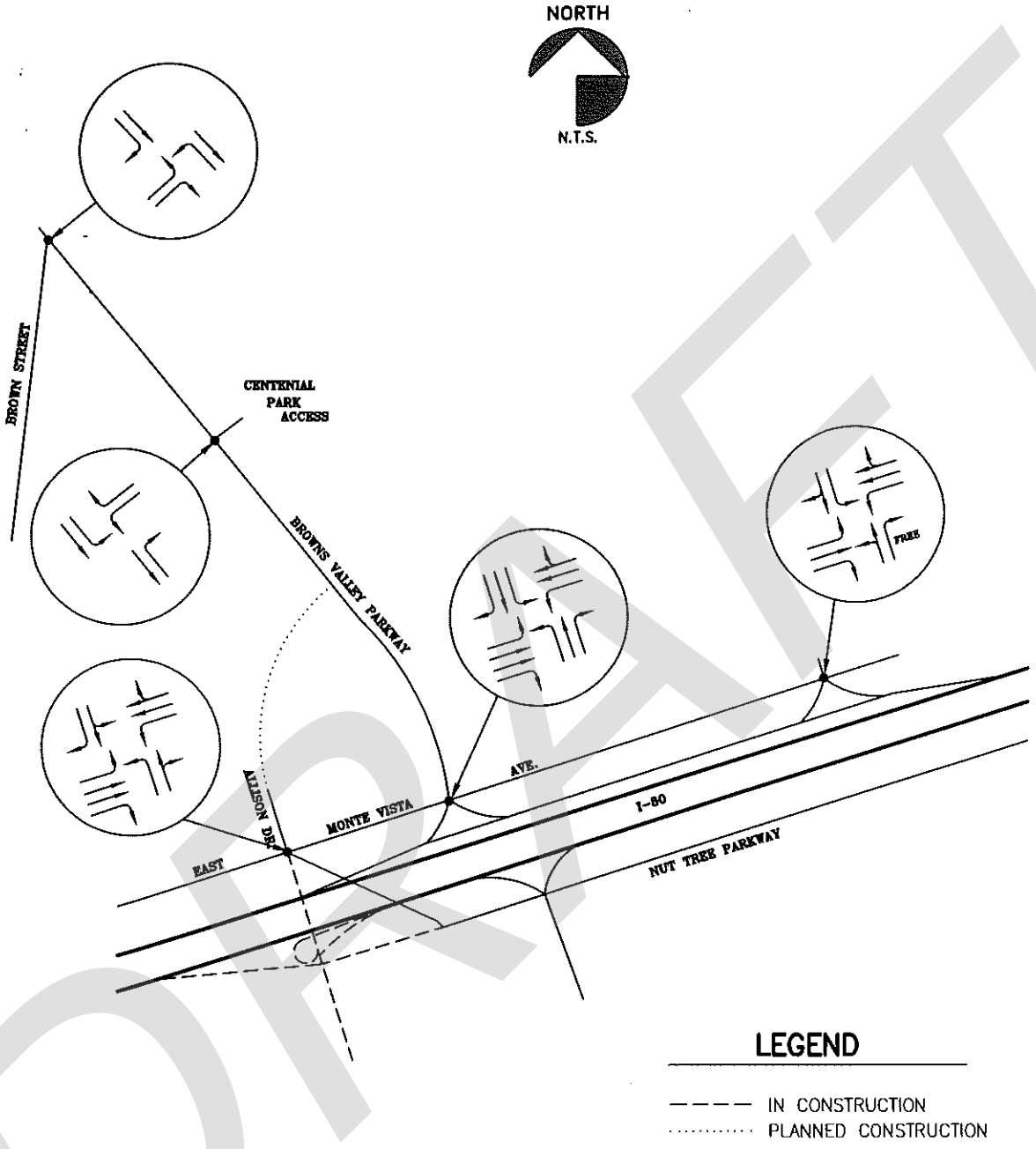
2.4 GENERAL PLAN TRANSPORTATION ELEMENT & LAND USE ASSUMPTIONS

The transportation Element of the 1990 General Plan (See appendix A) identifies Browns Valley Parkway, Allison Drive and East Monte Vista Avenue all as four lane arterial streets. It also calls for Allison Drive to extend from Browns Valley Parkway through the Park Site to the existing Allison Parkway to complete a north south connection to Vaca Valley Parkway.

Appendix B documents the total number of residential units and amount of nonresidential acreage developed for each model condition,: Existing, Existing plus Approved Projects, and Year 2010.

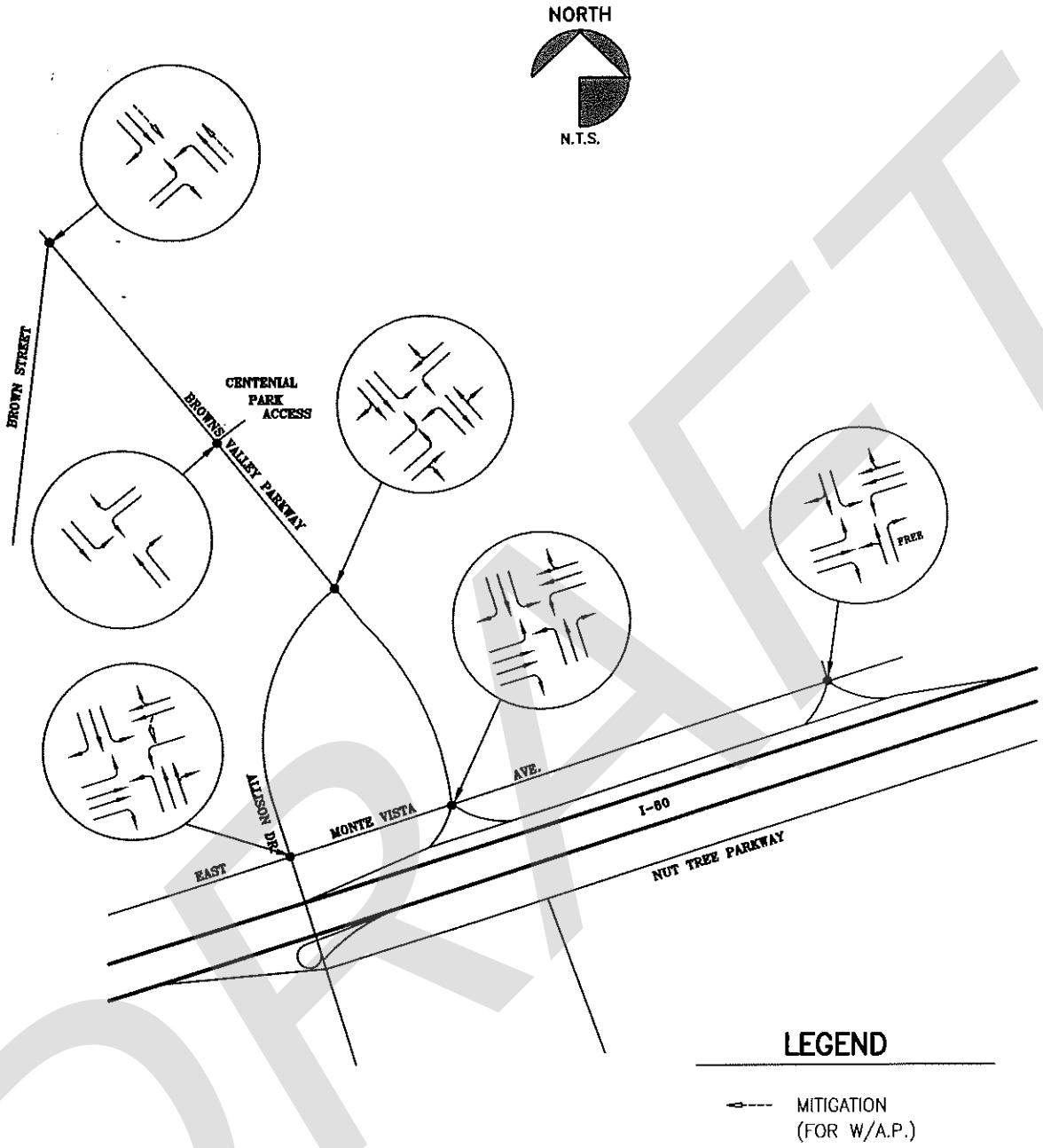
Although the General Plan shows the extension of Allison Drive through the park to connect with existing Allison Drive in the Kilpatrick-Powers Industrial Park, this roadway is not expected to constructed by the Year 2010. This is due to the fact the City's development forecast projects that the industrial park will have only 9 additional acres of industrial development within the current time frame of the General Plan. The industrial park has the potential to develop 198 acres, of which 31 is currently developed The amount of traffic generated from this level of development, when considered with cumulative generation, does not warrant construction of this extension. The Centennial Park Master Plan reserves a 60' right-of-way for a future two-lane extension of Allison Drive. For consistency with the current General Plan, the Centennial Park Master Plan should provide for an entrance from an ultimate Allison Drive and provide sufficient area for the construction of this roadway.

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CITY OF VACAVILLE PUBLIC WORKS TRAFFIC ENGENEERING	FIGURE 3 CENTENNIAL PARK MASTER PLAN
DATE: 1/30/97 APPROVED BY: O.H.	EXISTING IMPROVEMENTS NETWORK & STUDY INTERSECTIONS



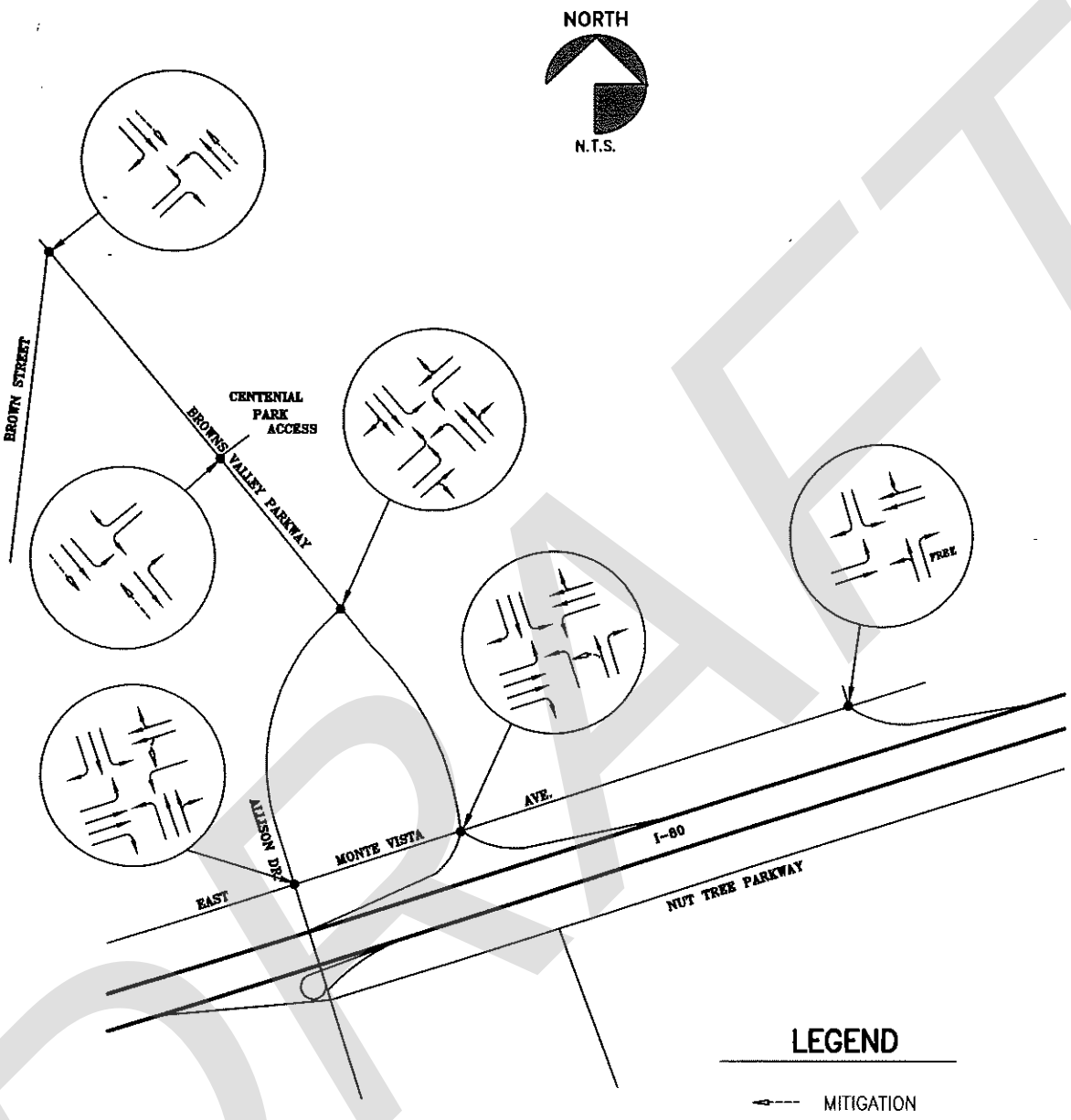
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CITY OF VACAVILLE
PUBLIC WORKS
TRAFFIC ENGENEERING

DATE: 1/30/97 APPROVED BY: O.H.

FIGURE 4
CENTENNIAL PARK MASTER PLAN

EXISTING 1/97 AND
NETWORK & STUDY INTERSECTIONS



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CITY OF VACAVILLE

PUBLIC WORKS

TRAFFIC ENGENEERING

DATE: 1/30/97 APPROVED BY: O.H.

FIGURE 5

CENTENNIAL PARK MASTER PLAN

YEAR 2010

NETWORK & STUDY INTERSECTIONS

CHAPTER 3 TRAFFIC ANALYSIS ASSUMPTIONS & METHODOLOGY

3.1 TRAFFIC ANALYSIS

The Vacaville General Plan includes 11 guiding and 13 implementing policies that address transportation and circulation issues (See Appendix A). Following are the Vacaville General Plan policies that are most relevant to the determination of the significance of traffic and circulation impacts.

6.1 G-1 Strive to maintain Level of Service (LOS) C as the minimum standard at all intersections, interchanges and road links . Design improvements to provide LOS C in the Year 2010 based on the City's development forecast.

6.1 G-2 LOS D, for a particular intersection, interchange or road link shall be allowed by a decision maker on a project as an interim level of service while improvements are programmed by the City which will improve the level of service to LOS C or better, LOS D may also be approved by the City as an allowable standard for the Year 2010 by the City Council for infill areas or isolated situations where existing development or other practical considerations limit improvements.

6.1 G-3 LOS E or LOS F for a particular intersection, interchange or road link may be allowed by the City Council after a public hearing on the basis of one of the following findings:

Finding 1

- The interchange , intersection or road link that will experience the projected lower level of service is in an infill or isolated area: and
- There is no practical or feasible way to mitigate the lower level of service; and
- the project resulting in the lower level of service is of clear overall public benefit.

Finding 2

- A capital improvement project is reasonably scheduled to be completed within three years of the project which will improve the projected level of service to LOS D or better; and
- The interim impact of the projected traffic congestion is offset by the public benefit of the project.

Finding 3

- The City has entered into a development agreement which legally commits the City to approve the proposed project.

The General Plan allows the City to approve a project that results in a LOS D as an interim level of service if improvements are programmed that will improve the LOS to C or better. The General Plan, Traffic Impact Mitigation Ordinance also allows a City decision maker to approve a project when LOS D exists for the long term, for infill areas or isolated situations where existing developments or other practical considerations limit improvements (Policy 6.1-G2). The General Plan also allows the City to accept LOS E and LOS F with specific findings.

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3.1 TRAFFIC ANALYSIS (Continued)

For the purpose of this study and in conformance with these standards, an impact is considered to have a significant environmental effect when an affected intersection will operate at LOS E or worse (V/C greater than 0.90). An affected intersection is defined as one where the change in Volume-to-Capacity Ratio is greater than two-hundredths (>0.02). City policy has been to use PM Peak Hour Volumes to establish the Level of Service, and to apply signalized intersection analysis to the analysis of intersections that are signalized or can reasonably be expected to be signalized by the Year 2010. The City has consistently applied the Intersection Capacity Utilization Method similar to the Planning Applications method described in Circular 212 to provide intersection analysis. Appendix C includes a description of this method and the assumptions used. Signalized analysis was applied to the intersection of the northerly Centennial Driveway, to allow comparison. It is not intended to imply this intersection will be signalized or could be in the future.

3.2 TRIP GENERATION

There are three components to the expected trip generation for the recreation improvements included on the Master Plan for Centennial Park, existing use, planned use and proposed use. Table I outlines trip generation expected based on Institute of Transportation Engineers (ITE) published rates. Trip Generation is based on 86 acres developed as park and 50 acres as Golf Course.

CENTENNIAL PARK TABLE 1

ITE TRIP GENERATION

DESCRIPTION (ITE#)	TIME	G/P. DESIG,	ITE RATE		CALCULATED TRIP GEN.
			RANGE	AVERAGE	
City Park (411) 86 Acres	Weekday	PK	1.04-8.00	2.23	192
	Est. PM Pk. 4-6			0.223	19
County Park (412) 86 Acres	Weekday		0.17-53.41	2.99	257
	Est. PM Pk. 4-6			0.3	26
	Saturday		4.04-24.74	12.14	1045
	Sat. Pk. Hr.		0.52-3.2	2.24	193
	Sunday		0.32-90.0	10.23	880
	Sun. Pk. Hr.		1.55-4.74	3.6	310
Golf Course (430) 50 Acres	Weekday	PR	2.33-24.01	8.33	416
	Est. PM Pk. 4-6		0.25-1.45	0.39	19
	Saturday		2.2-22.84	7.54	377
	Sat. Pk. Hr.		0.31-1.08	0.64	32
	Sunday		2.00-24.73	8.06	403
	Sun. Pk. Hr.		0.36-0.99	0.58	29
Total City + Golf	Weekday	PK&PR			608
	Est. PM Pk. 4-6				39
Total County Park + Golf	Weekday	PK&PR			673
	Est. PM Pk. 4-6				45
	Saturday				1421
	Sat. Pk. Hr.				225
	Sunday				1283
	Sun. Pk. Hr.				339

NOTES: G/P Desig. = Genral Plan Designation PK = Park PR = Private Recreation

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3.2 TRIP GENERATION (Continued)

Investigating proposed uses resulted in finding that baseball and soccer would be the main organized uses of these facilities. Talking with local representatives, City Recreation Division for baseball, and Vacaville Youth Soccer League for soccer, the level of participation was determined. Table 2 outlines the yearly schedule for baseball and soccer uses. Table 3 develops expected trip generation based on this information.

CENTENNIAL PARK TABLE 2
BASEBALL & SOCCER LEAGUE SCHEDULES

JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
		LITTLE LEAGUE				YOUTH BASEBALL					
							YOUTH SOCCER				

CENTENNIAL PARK TABLE 3
CALCULATED TRIP GENERATION USING FACILITY USAGE

Description	Quantity	Max. Use/Field or Court		Max. Total	Est. Pk.Hr. 4-6 PM		Est. Weekend Pk.Hr.	
		Players	Coachs&Refs		Factor	Extension	Factor	Extension
EXISTING & PLANNED PUBLIC IMPROVEMENTS								
Baseball Fields	4	30	6	144	0.50	72	0.68	97
Hobby Land Soccer	2	15	2	34	0.40	14	0.68	23
Soccer Field	1	30	7	37	0.40	15	0.68	25
Tennis Courts (In Design)	4	4	0	16	0.50	8	0.75	12
Subtotal				231		108	1.45	157
PROPOSED PUBLIC FACILITIES								
Full Size Soccer Fields	9	30	7	333	0.30	100	0.68	225
Hobby Land Soccer	2	15	2	34	0.30	10	0.68	23
Sand Volleyball/Soccer	1	30	0	30	0.30	9	0.68	20
Golf Course	9 Holes	40	0	40	0.75	30	0.75	30
Picnic Facilities				20	0.30	6	0.50	10
Subtotal				387		155	1.99	308
PROPOSED PRIVATE FACILITIES								
Indoor Soccer Fields	2	30	5	70	0.56	39	0.72	50
Indoor Basketball	4.5	18	3	95	0.56	53	0.72	68
Employees	15			15	0.50	8	0.75	11
SUBTOTAL				165		100	1.30	130
TOTAL PROPOSED				552		255	1.72	438
GRAND TOTAL				783		363		595

According to Community Services Staff, the baseball fields are utilized for organized practice and games from March through October. Little League season extends from March to June. The Little League schedule includes practices beginning in March from after school, approximately 3 PM, until dark utilizing all 4 fields, with one team per field. Little League games begin in late March starting at 5 PM and continuing until dark, utilizing 3 of the 4 fields. Teams generally consist of 12 players and 2 coaches. Youth Baseball uses the fields from mid June through October, scheduling practices and games from August through November. See Table 2 for schedules.

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3.2 TRIP GENERATION (Continued)

According to the President of Vacaville Youth Soccer League 2400 Vacaville youth play soccer on 176 teams from August 1 through the third week in November. Recreational teams are 144 of these teams, with an average of 15 players per team. Soccer practices occur weeknights from 4 PM until dark and games are played on Saturdays between 8:00 AM until 3:30 PM. The league utilizes twenty-two (22) fields throughout the City to hold practices and games. The league schedules two tournaments a year one in August for 32 teams of which 2 or 3 are local teams, and one in November for 48 teams of which 3 or 4 are local. teams.

3.3 EXISTING TRAFFIC COUNTS

The City accomplishes an annual audit of the Level of Service (LOS) for signalized and freeway ramp intersections as a part of the Growth Audit. The LOS based on these counts is found in Table 4. These counts were accomplished in September of 1996. At this time the two lane (one in each direction) East Monte Vista Overcrossing still existed.

The City will continue to monitor these intersections, at least annually, to determine how the Allison Drive improvements affect to circulation in this area.

3.4 MINUTP TRAFFIC MODEL

The City of Vacaville operates and maintains a MINUTP traffic Model for Citywide trip generation and distribution. This model was last calibrated in 1990. A calibration for 1995 is currently in progress, but projections based on this calibration are not yet available. The 1990 calibration as updated with the 1944 Land Use projections developed for the analysis of the North Village Development Project is the basis for the traffic model analysis. Appendix B documents total land use for each category and condition.

The traffic volumes in the vicinity of this project were developed through use of the Vacaville Citywide MINUTP Model for the following scenarios:

1. Existing Condition 1/97 With Allison Extension (EMV to Browns Valley)
2. Existing Condition 1/97 with Centennial Park
3. Existing Plus Approved Projects With Allison Extension (EMV to Browns Valley)
4. Existing Plus Approved Projects with Centennial Park
5. Year 2010 without Centennial Park
6. Year 2010 with Centennial Park

The results of existing and future model runs are shown on the MINUTP Model plots of the study area. Figures 6 through 11 show the turning movement volumes with and without the proposed park improvements.

The model distributed project trip genration in Year 2010 as 58% (216 trips) entering, and 42% (157 trips) exiting. Of the trips exiting, 70% (152 trips) exit to points South, and 30% (64 trips) exit to points North of the project. Of the trips entering, 69% (108 trips) enter from points South , and 32% (49 trips) enter from points North of project. Traffic volumes in the area do not additively increase by these volumes since the model allows for the redistribution of trips. For example of the trips to and from points north of the park impact Browns Valley Parkway just north of Brown Street by an increase of 9 northbound vehicles and 4 southbound vehicles for the Year 2010 condition.

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3.4 MINUTP TRAFFIC MODEL (Continued)

Models generated PM Peak hour Counts (Highest hour between 4 and 6 PM). The model assigns traffic volumes using gravity, assigning traffic to the one shortest path unless severe congestion develops. The volumes generated by the model were adjusted between the parallel routes of East Monte Vista and the freeway collector ramp northeast of Browns Valley Parkway to gain some assignment of traffic to the alternative parallel route. For the existing conditions the model assigned all traffic using the I-80 westbound offramp to the northbound leg of Browns Valley/East Monte Vista intersection. One third of these left turns and through movements were reassigned to the northerly offramp as left turns and then as corresponding westbound right turns and through movements at Browns Valley/East Monte Vista. In the existing conditions all traffic from the east made a left turn onto the northerly onramp using the parallel ramp to access I-80. One third of these left turns were reassigned as left turns to the intersection of Browns Valley/East Monte Vista. For the Year 2010 Condition one-fourth of the left turns and through movements northbound at Browns Valley/East Monte Vista were reassigned as corresponding westbound throughs and rights at this same intersection and as northbound lefts at the northerly offramp. It is assumed that the northerly I-80 onramp no longer exists in the Year 2010 so all westbound lefts must access I-80 at Browns Valley/East Monte Vista. The model plots included as figures 6 through 11 represent this redistribution of traffic volumes.

AM Volumes were not developed or analyzed since no organized use and very little drop-in use of park facilities would be expected during an AM peak hour between 7:00 and 9:00 AM.

3.5 INTERSECTION LEVEL OF SERVICE

This study focused on the following intersections:

STUDY INTERSECTION	EXISTING CONTROL
1. Browns Valley / Brown	Signalized
2. Allison / East Monte Vista	Signalized
3. Browns Valley / East Monte Vista	Signalized
4. I-80 WB Ramps/ East Monte Vista ("Northerly Ramps")	One-Way Stop
5. Browns Valley /Allison	Signalized
5. Browns Valley / North Park D/W	One-Way Stop

The level of service (LOS) for these intersections was determined using the Intersection Capacity Utilization Method which is similar to the Planning Applications method described in Circular 212 dated January 1980, published by the Transportation Board of the National Academy of Sciences. City policy has been to develop the V/C ratio and associated LOS based on the ICU Method for all intersections in order to provide a consistent basis for the comparison of the LOS. Since analysis of future conditions is included, the use of the ICU method allows a consistent comparison to future conditions that would include signalization. Applied in this method is the City's accepted lane capacity of 1650 vehicles/hour. See Appendix C for description of V/C ratios and associated Levels of Service, and Appendix D for printouts of the of the V/C analysis.

Represented in the following table are the results of intersection analysis for the subject intersections based on trip assignment accomplished by the Vacaville MINUTP Model and incorporated in the ICU method of intersection analysis.

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3.5 INTERSECTION LEVEL OF SERVICE (Continued)

CENTENNIAL PARK TABLE 4
V/C ANALYSIS RESULTS
9/96 COUNTS, 1/97 EXISTING, AND EXISTING + AP. PROJECTS MODELS

'94 MODEL RESULTS	9/96 COUNT	1/97 EXISTING	1/97 W/PARK	1/97 +AP.PROJ.	1/97 +A.P. W/PARK
BROWNS VALLEY/ BROWN With 2nd NB & SB Thrus	B (0.69)	C (0.77)	C (0.77)	D (0.85) A (0.56)	D (0.85) A (0.55)
ALLISON/ E.MONTE VISTA Revise 1 T to T/L (2nd Left)	D (0.84)*	D (0.81) B (0.62)	D (0.85) B (0.66)	D (0.88) B (0.69)	E (0.91) C (0.75)
BROWNS VALLEY/ E.M.V.	C (0.71)	B (0.65)	B (0.65)	C (0.75)	C (0.76)
I-80 WB/ E.MONTE VISTA	A (0.43)	A (0.58)	B (0.65)	B (0.63)	B (0.62)
BROWNS VALLEY/ ALLISON	N.A	A (0.56)	B (0.63)	B (0.62)	B (0.69)
BROWNS VALLEY/ N. D/W With 2nd NB & SB Thrus	N.A	C (0.76)	C (0.78)	D(0.84) A (0.49)	D (0.85) A (0.51)

NOTES: * Allison/EMV Existing 9/96 based on count for EMV O/C

1/97 Models assume Allison O/C And Extension to Browns Valley complete.

CENTENNIAL PARK TABLE 5
V/C ANALYSIS RESULTS
YEAR 2010 (1994) PROJECTION

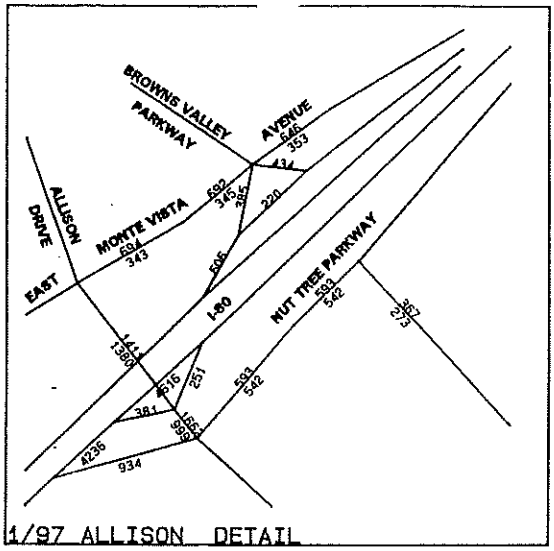
'94 MODEL RESULTS	YEAR 2010 W/O PARK	YEAR 2010 WITH PARK
BROWNS VALLEY/ BROWN With 2nd NB & SB Thrus	D/E (0.90) B (0.61)	D/E (0.90) B (0.61)
ALLISON/ E.MONTE VISTA Revise one WB to Thru Shared Thru/Left (2nd Left) WB Thru/Left (2nd Left) + NB Thru/R (3rd Thru)	E (0.99) D (0.83) C (0.74)	F (1.05) D (0.85) C (0.78)
BROWNS VALLEY/ E.MONTE VISTA Revise NB T to shared Thru/Left (2nd Left)	D (0.89) D (0.86)	D (0.89) D(0.86)
I-80 WB/ E.MONTE VISTA	A (0.56)	A (0.55)
BROWNS VALLEY/ ALLISON Add SB Right Turn Lane	C (0.71) A (0.58)	C/D (0.80) B (0.67)
BROWNS VALLEY/ CENTENNIAL N. D/W With 2nd NB & SB Thrus	D (0.89) A (0.54)	D/E (0.90) A (0.56)

Notes: Completion of widening Browns Valley to 4 lanes is a DIF project, ~ 2007

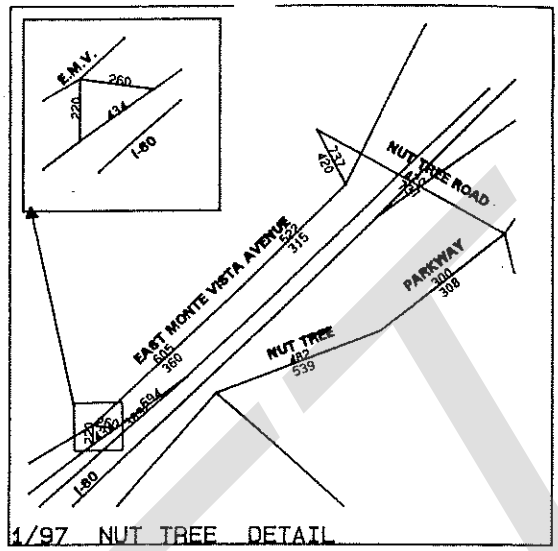
No further mitigation for the intersection of Browns Valley/EMV is provided due to the physical constraint created by the limited distance between EMV and I-80.

Improvements outlined in Caltrans PSR for Weave Correction at the I-80/I-505 Interchange are assumed to be in place.

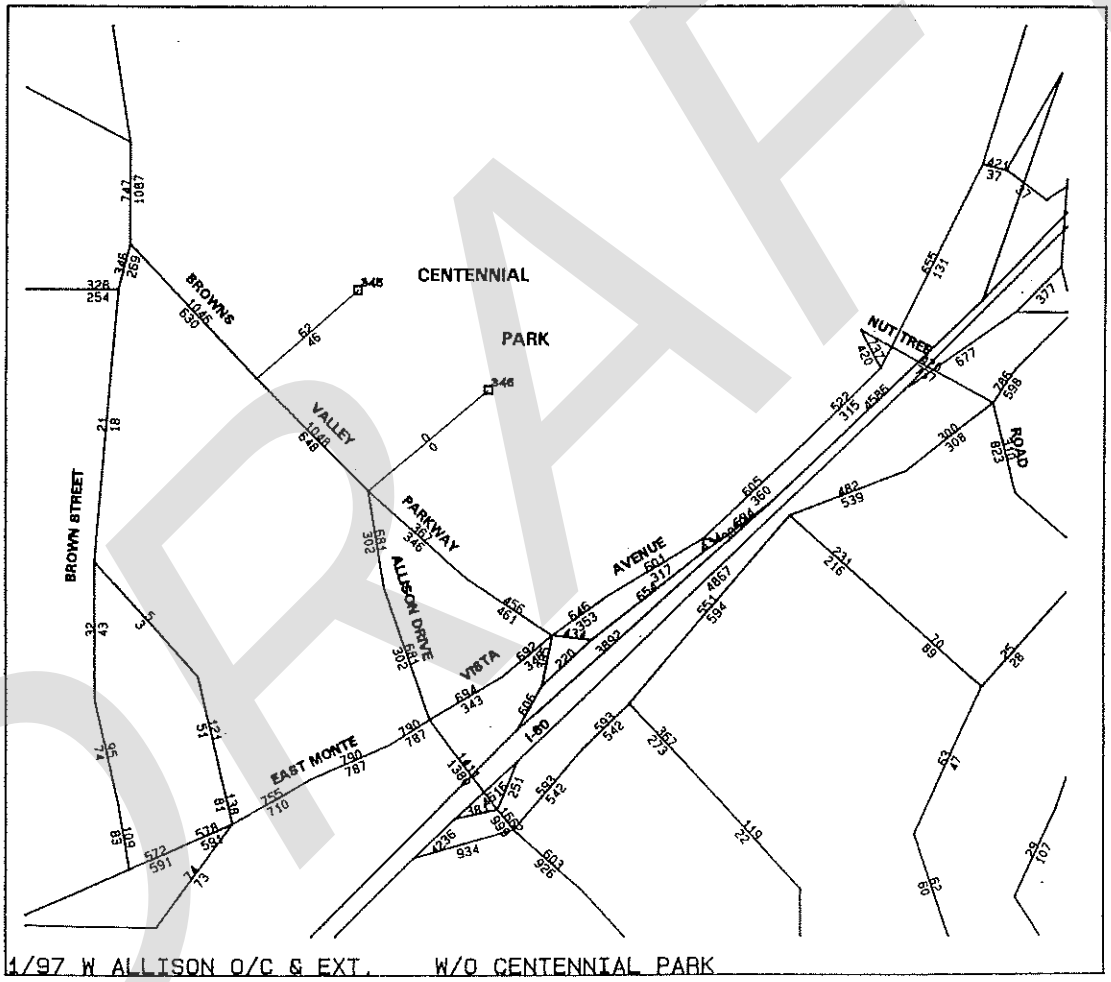
DRAFT



1/97 ALLISON DETAIL



1/97 NUT TREE DETAIL



1/97 W ALLISON O/C & EXT. W/O CENTENNIAL PARK

CITY OF VACAVILLE

PUBLIC WORKS

TRAFFIC ENGENEERING

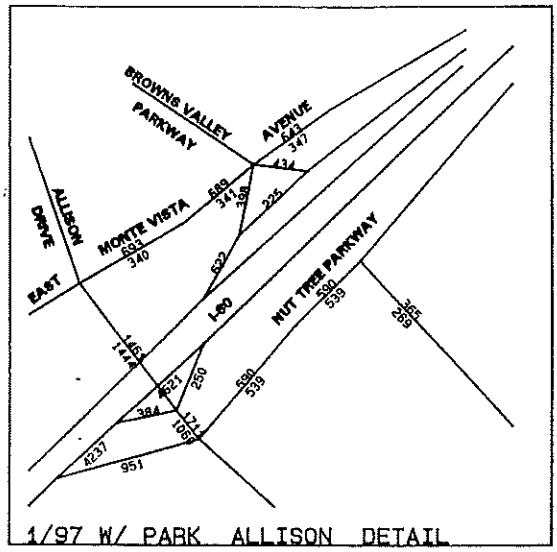
DATE: 1/30/97 APPROVED BY: O.H.

FIGURE 6

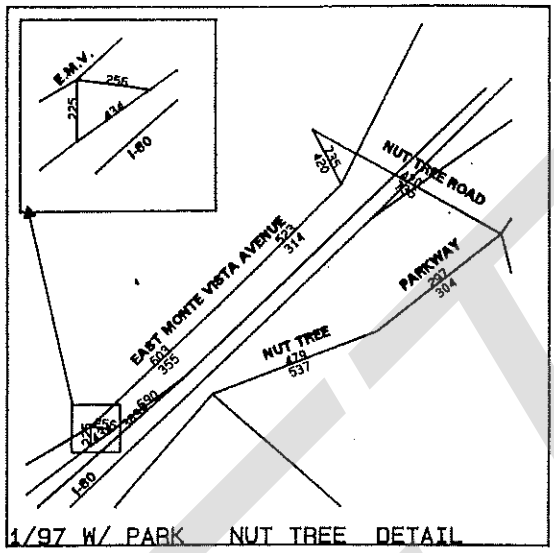
CENTENNIAL PARK MASTER PLAN

EXISTING 1/97 WITHOUT CENTENNIAL PARK TRAFFIC MODEL VOLUMES

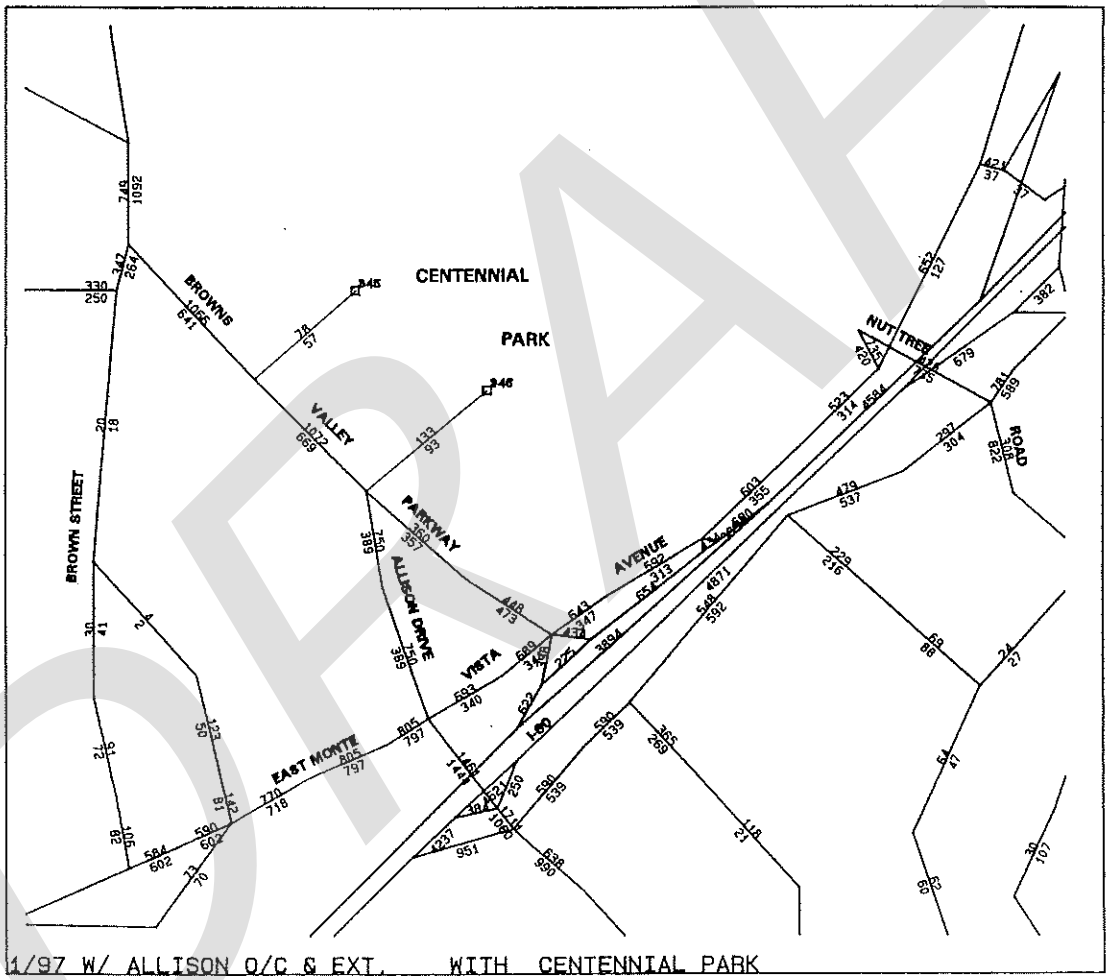
DRAFT



1/97 W/ PARK ALLISON DETAIL



1/97 W/ PARK NUT TREE DETAIL



1/97 W/ ALLISON O/C & EXT. WITH CENTENNIAL PARK

CITY OF VACAVILLE

PUBLIC WORKS

TRAFFIC ENGENEERING

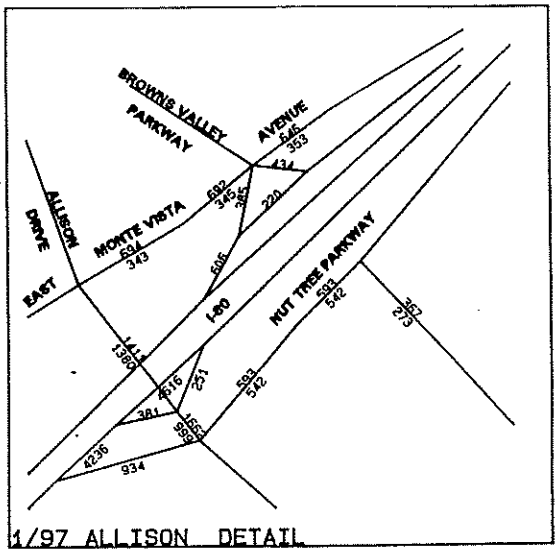
DATE: 1/30/97 APPROVED BY: O.H.

FIGURE 7

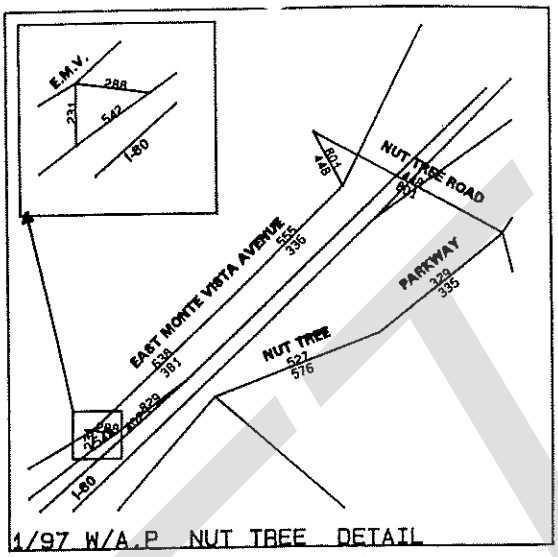
CENTENNIAL PARK MASTER PLAN

EXISTING 1/97 WITH CENTENNIAL PARK TRAFFIC MODEL VOLUMES

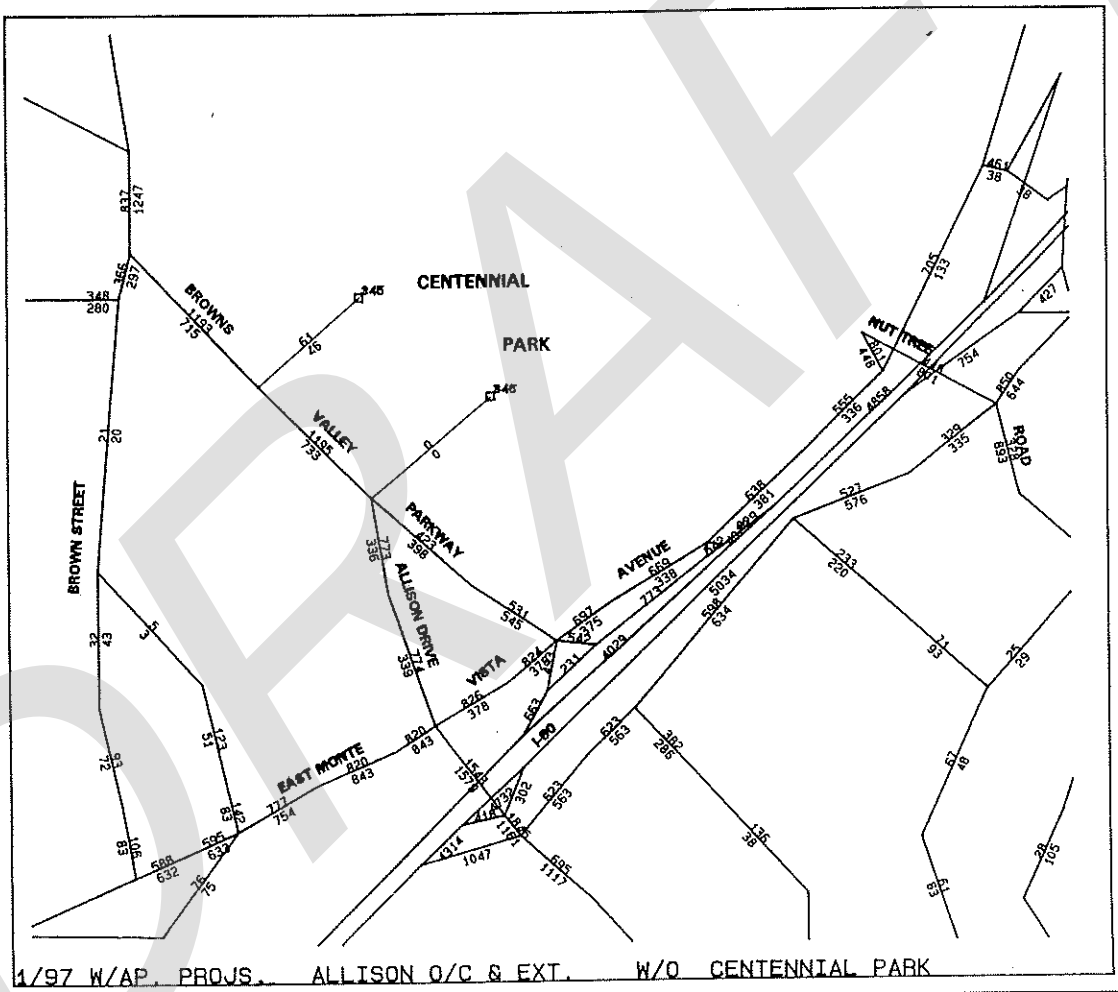
DRAFT



1/97 ALLISON DETAIL



1/97 W/A.P NUT TREE DETAIL



1/97 W/AP. PROJS. ALLISON O/C & EXT. W/O CENTENNIAL PARK

CITY OF VACAVILLE

PUBLIC WORKS

TRAFFIC ENGENEERING

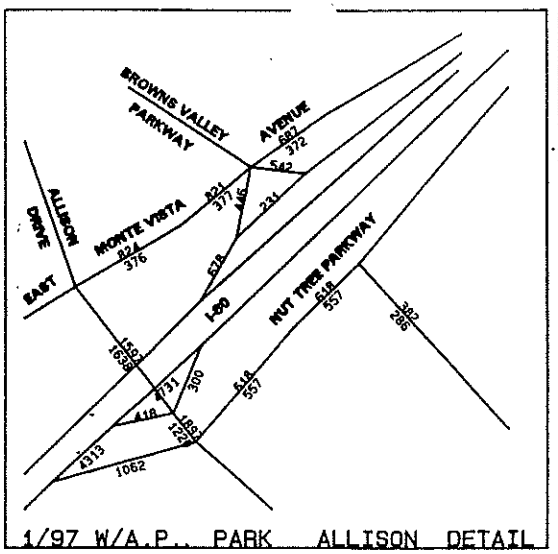
DATE: 1/30/97 APPROVED BY: O.H.

FIGURE 8

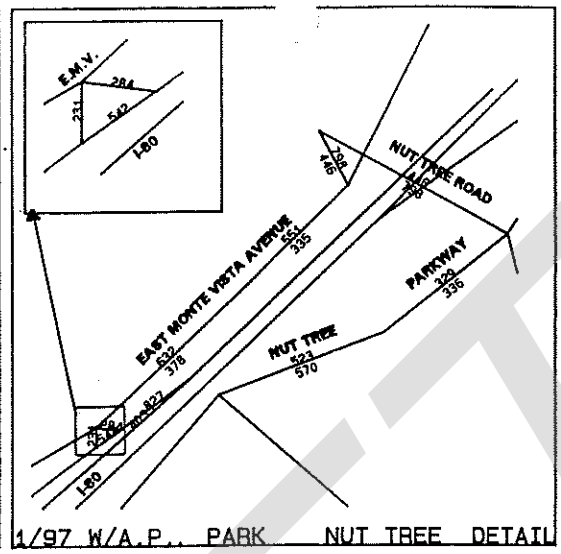
CENTENNIAL PARK MASTER PLAN

EXISTING + APPROVED PROJECTS WITHOUT CENTENNIAL PARK TRAFFIC MODEL VOLUMES

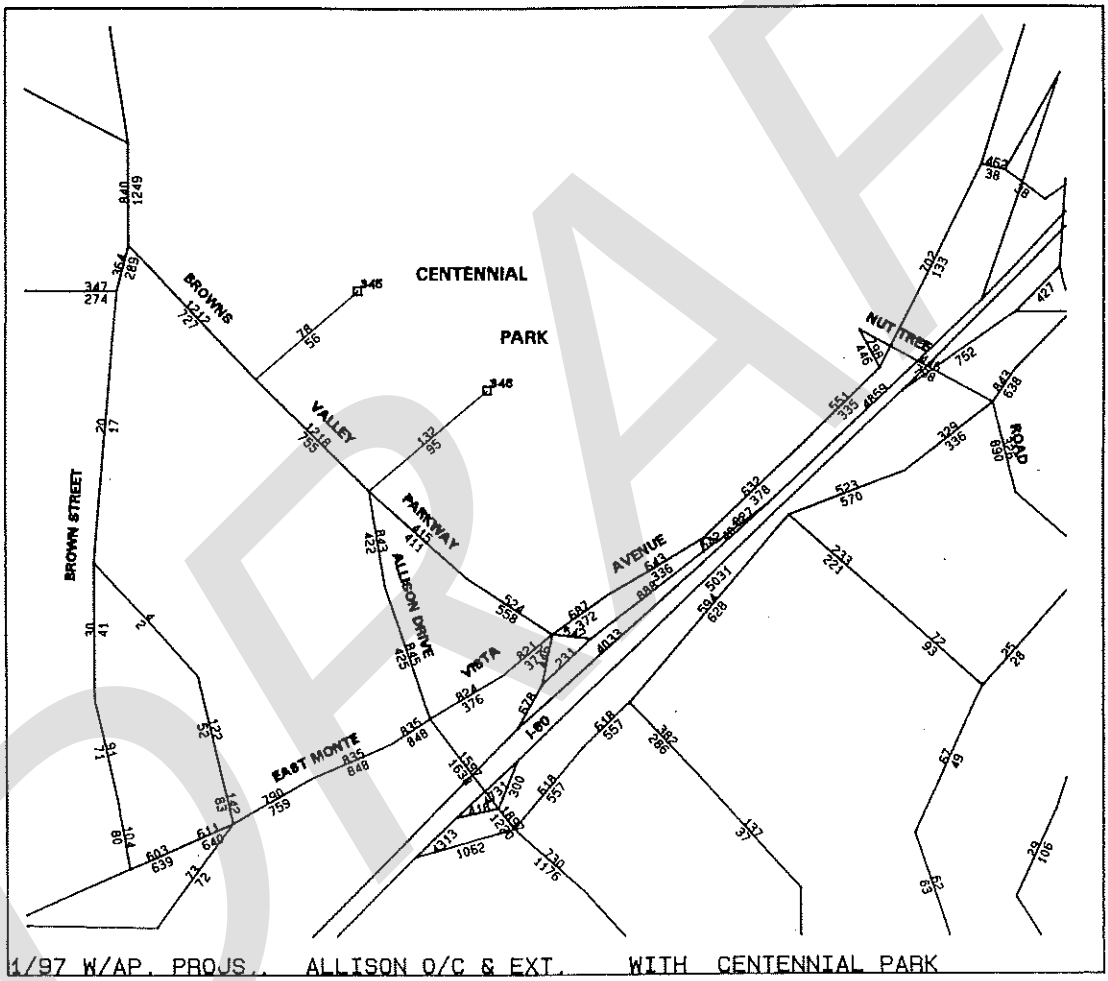
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1/97 W/A.P., PARK ALLISON DETAIL



1/97 W/A.P., PARK NUT TREE DETAIL



1/97 W/AP. PROJS., ALLISON O/C & EXT. WITH CENTENNIAL PARK

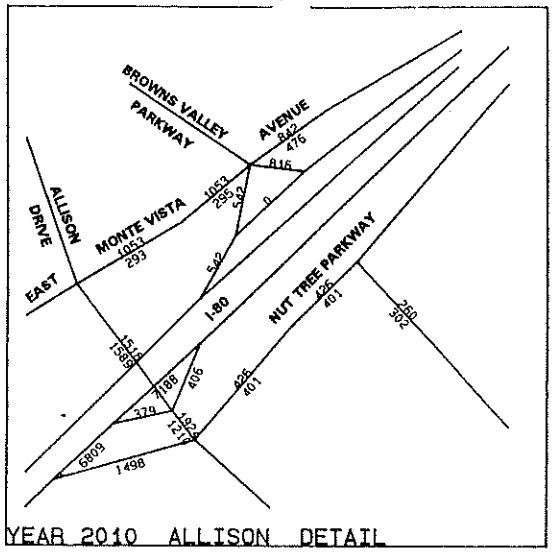
CITY OF VACAVILLE
PUBLIC WORKS
TRAFFIC ENGENEERING

DATE: 1/30/97 APPROVED BY: O.H.

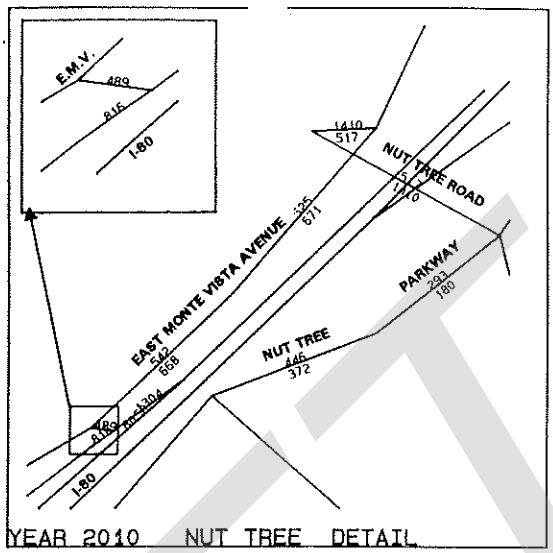
FIGURE 9
CENTENNIAL PARK MASTER PLAN

EXISTING + APPROVED PROJECTS
WITH CENTENNIAL PARK
TRAFFIC MODEL VOLUMES

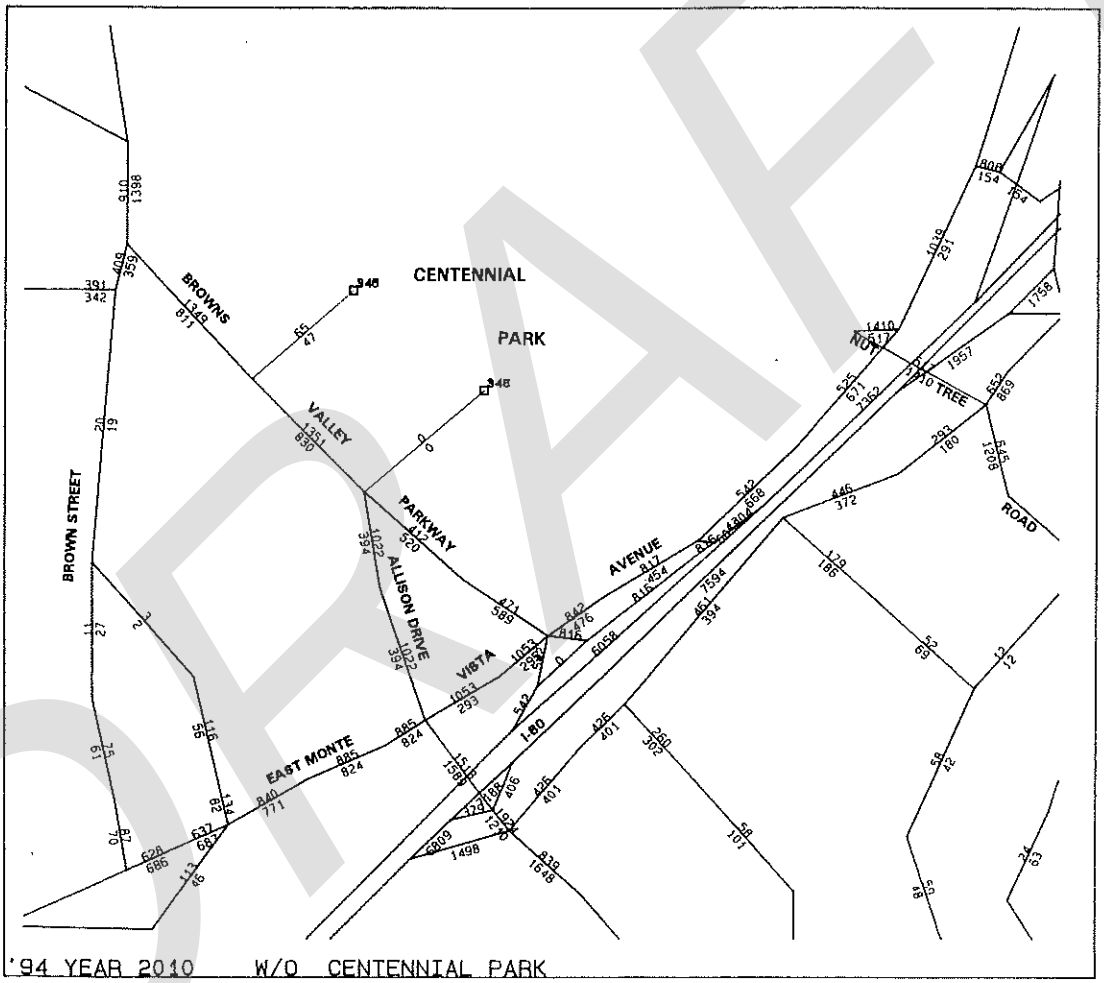
DRAFT



YEAR 2010 ALLISON DETAIL



YEAR 2010 NUT TREE DETAIL



'94 YEAR 2010 W/O CENTENNIAL PARK

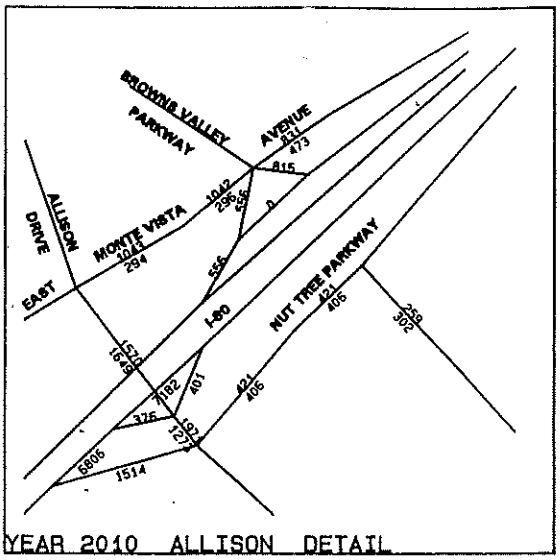
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CITY OF VACAVILLE
PUBLIC WORKS
TRAFFIC ENGENEERING

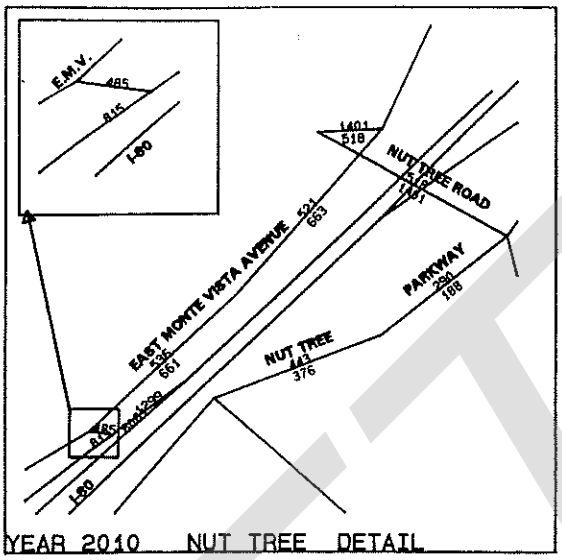
DATE: 1/30/97 APPROVED BY: O.H.

FIGURE 10
CENTENNIAL PARK MASTER PLAN

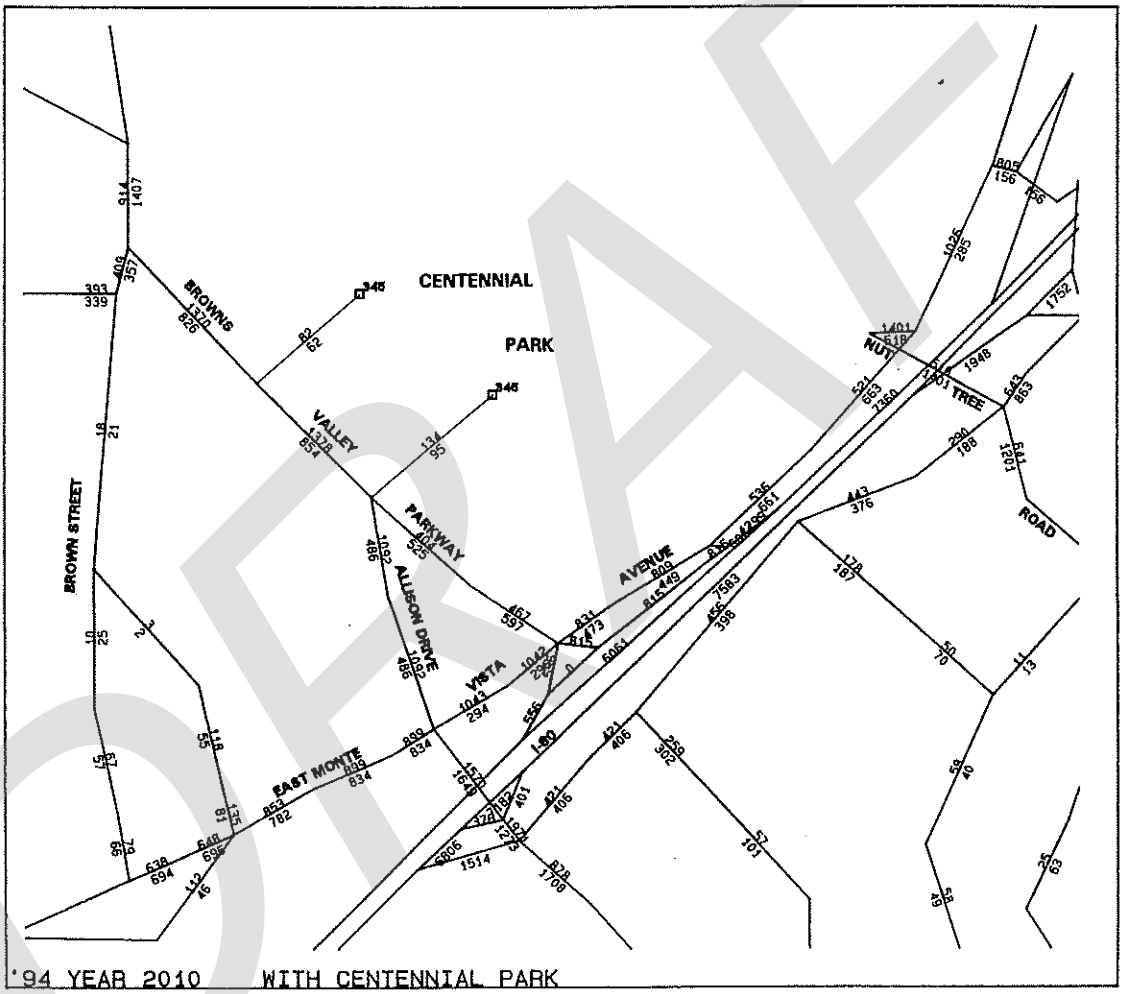
YEAR 2010 WITHOUT
CENTENNIAL PARK
TRAFFIC MODEL VOLUMES



YEAR 2010 ALLISON DETAIL



YEAR 2010 NUT TREE DETAIL



'94 YEAR 2010 WITH CENTENNIAL PARK

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CITY OF VACAVILLE

PUBLIC WORKS

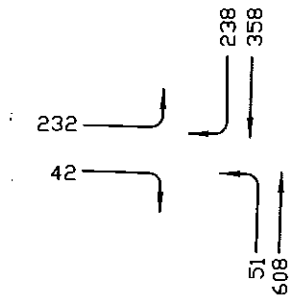
TRAFFIC ENGENEERING

DATE: 1/30/97 APPROVED BY: O.H.

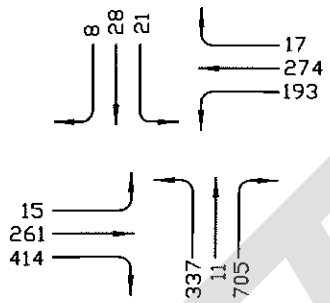
FIGURE 11

CENTENNIAL PARK MASTER PLAN

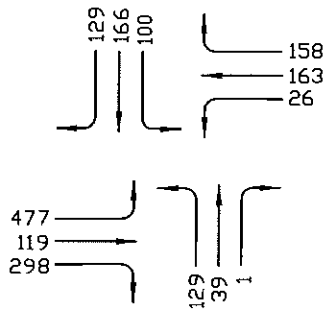
YEAR 2010 WITH CENTENNIAL PARK TRAFFIC MODEL VOLUMES



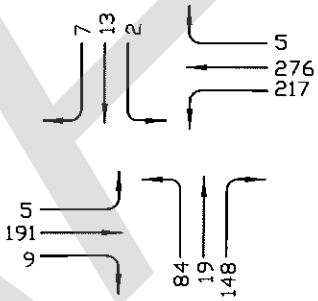
BROWNS VALLEY/BROWN



ALLISON/E. MONTE VISTA



BROWNS VALLEY/MONTE VISTA



I-80 RAMPS/E. MONTE VISTA

N/A

BROWNS VALLEY/ALLISON

N/A

BROWNS VALLEY/NORTH D/W

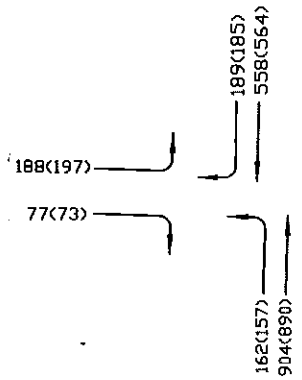
CITY OF VACAVILLE
PUBLIC WORKS
TRAFFIC ENGENEERING

DATE: 1/30/97 APPROVED BY: O.H.

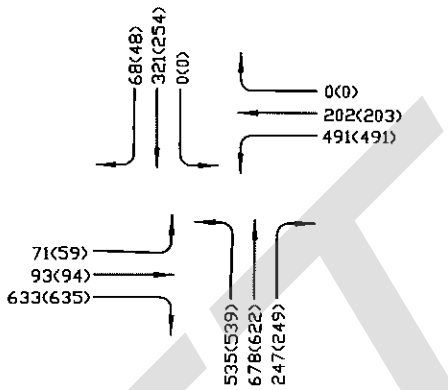
FIGURE 12
CENTENIAL PARK MASTER PLAN

EXISTING PM PEAK HOUR
9/96 TURNING MOVEMENTS

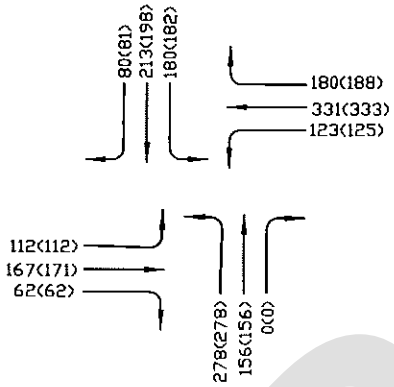
DRAFT



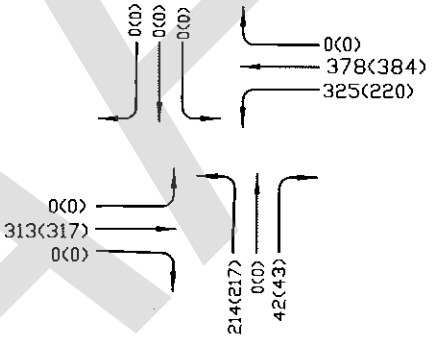
BROWNS VALLEY/BROWN



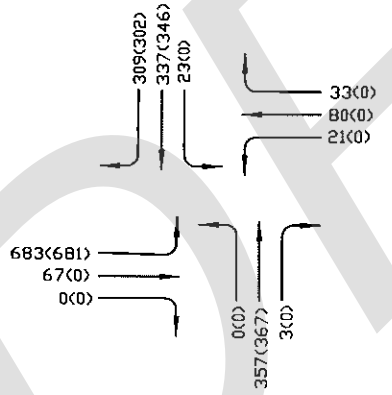
ALLISON/E. MONTE VISTA



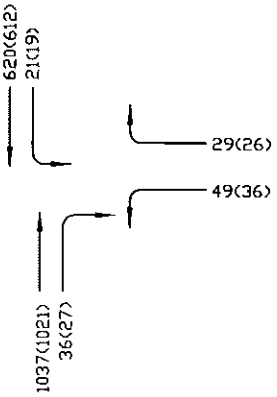
BROWNS VALLEY/MONTE VISTA



I-80 RAMPS/E. MONTE VISTA



BROWNS VALLEY/ALLISON



BROWNS VALLEY/NORTH D/W

CITY OF VACAVILLE

PUBLIC WORKS

TRAFFIC ENGENEERING

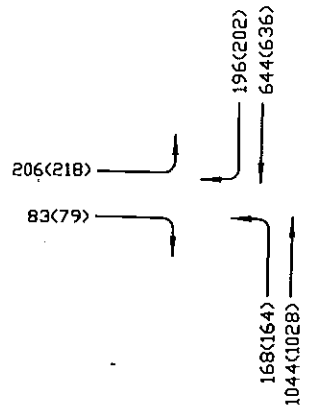
DATE: 1/30/97 APPROVED BY: O.H.

FIGURE 13

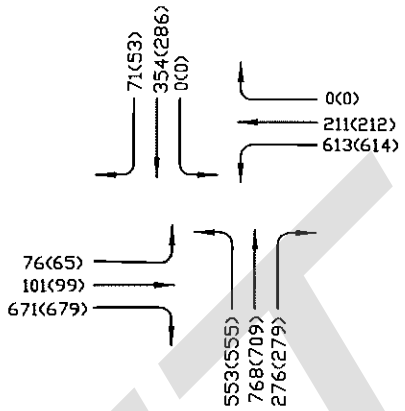
CENTENIAL PARK MASTER PLAN

EXISTING 1/97 PM PEAK HOUR TURNING MOVEMENTS W/(W/O) CENTENNIAL PARK

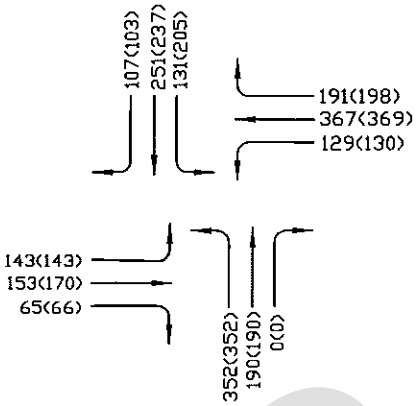
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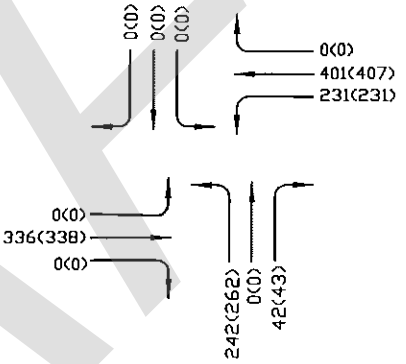
BROWNS VALLEY/BROWN



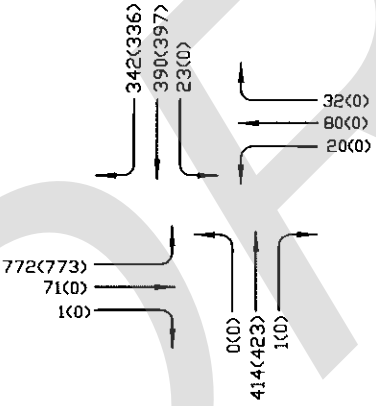
ALLISON/E. MONTE VISTA



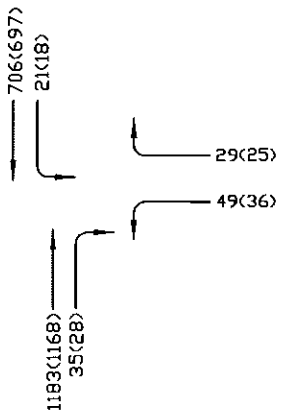
BROWNS VALLEY/MONTE VISTA



I-80 RAMPS/E. MONTE VISTA



BROWNS VALLEY/ALLISON



BROWNS VALLEY/NORTH D/W

CITY OF VACAVILLE

PUBLIC WORKS

TRAFFIC ENGENEERING

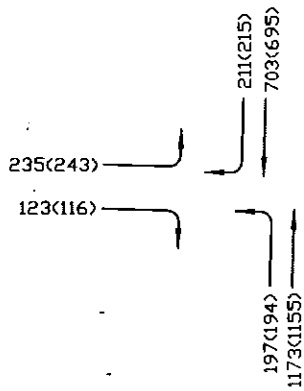
DATE:1/30/97 APPROVED BY: O.H.

FIGURE 14

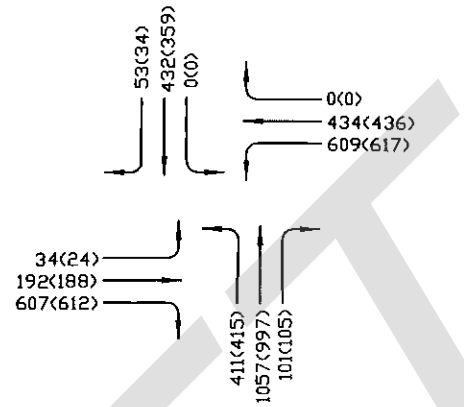
CENTENIAL PARK MASTER PLAN

EXISTING1/97+APPROVED PROJECTS PM PEAK HOUR TURNING MOVEMENTS WITH (W/O) CENTENNIAL PARK

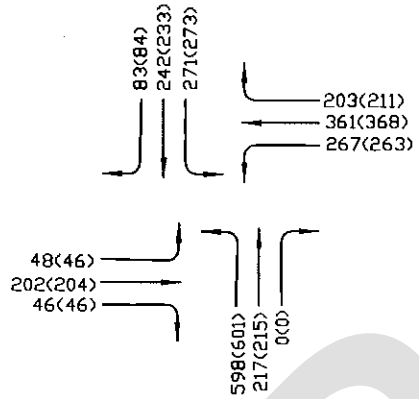
DRAFT



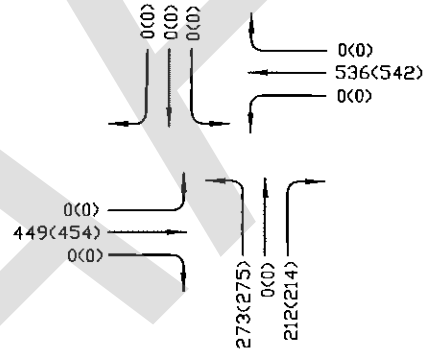
BROWNS VALLEY/BROWN



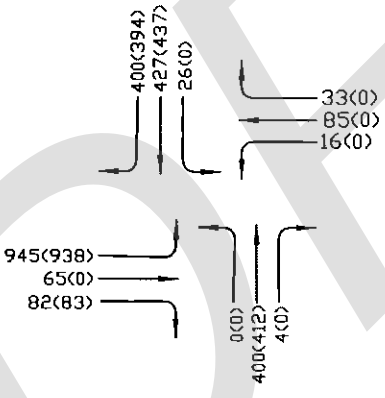
ALLISON/E. MONTE VISTA



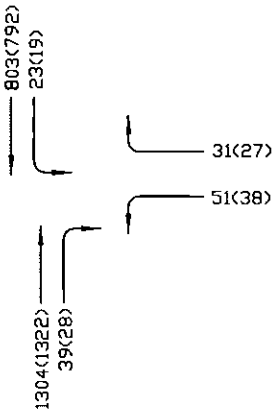
BROWNS VALLEY/MONTE VISTA



I-80 RAMPS/E. MONTE VISTA



BROWNS VALLEY/ALLISON



BROWNS VALLEY/NORTH D/W

CITY OF VACAVILLE
PUBLIC WORKS
TRAFFIC ENGENEERING

DATE:1/30/97 APPROVED BY: O.H.

FIGURE 15
CENTENIAL PARK MASTER PLAN

YEAR 2010 PM PEAK HOUR
WITH (W/O) CENTENNIAL PARK
TURNING MOVEMENTS

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4.2 TRAFFIC IMPACT MITIGATION MEASURES & RESPONSIBILITY

The City shall conduct annual counts and determine LOS for each of the intersections identified to be affected by a potentially significant or significant environmental effect. The City shall administer the current Development Impact Fee Program to provide the following improvements prior to LOS changing from D to E:

Browns Valley Parkway - Complete widening to four lanes between East Monte Vista and Brown Street, including any widening North of Brown Street to provided turn lanes and transitions.

Allison /East Monte Vista - Provide additional westbound left turn lane and an additional northbound through lane, should City Council decide LOS D is not acceptable LOS for the Year 2010.

The City shall administer the following traffic striping and signal improvements prior to LOS changing from D to E:

Allison / East Monte Vista - Revise westbound through lane to a shared through/left turn lane to provide additional left turn capacity.

Browns Valley / East Monte Vista - Revise northbound through lane to a shared through/left turn lane to provide additional left turn capacity. Additional mitigation measures are not identified

The following list indicates the LOS resulting from the providing these mitigation measures:

Existing Conditions (9/96)

Allison / East Monte Vista — *See Existing Conditions 1/97 since improvements in construction revise circulation patterns.*

Existing Condition (1/97)

	W/O Centennial Park	With Centennial Park
Allison / East Monte Vista	LOS B (V/C=0.62)	LOS B (V/C=0.66)

Existing Condition With Approved Projects (1/97)

	W/O Centennial Park	With Centennial Park
Allison / East Monte Vista	LOS B (V/C=0.69)	LOS C (V/C=0.75)
Browns Valley / Brown	LOS A (V/C=0.56)	LOS A (V/C=5.5)

Year 2010

	W/O Centennial Park	**With Centennial Park**
Allison / East Monte Vista	LOS D (V/C=0.83)	LOS D (0.85)
or with added mitigation	LOS C (V/C=0.74)	LOS C (0.78)
Browns Valley / Brown	LOS B (V/C=0.61)	LOS B (V/C=0.61)
Browns Valley / E.Monte Vista	LOS D (V/C=0.86)	LOS D (V/C=0.86)
Browns Valley / North Park D/W	LOS A (V/C=0.54)	LOS A (V/C=0.56)
Browns Valley / Allison	LOS C (V/C=0.71)	LOS C/D (0.80)
or with added mitigation	LOS A (V/C=0.58)	LOS B (V/C=0.67)

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CHAPTER 4 RESULTS
TRAFFIC IMPACT & MITIGATION DETERMINATION

4.1 TRAFFIC IMPACTS

The General Plan includes 11 guiding and 13 implementing policies that address transportation. Consistent with these polices an impact is considered a significant environmental effect when an affected intersection will operate at LOS E or Worse (V/C>0.90). An affected intersection is defined as one where the change in Volume-to-Capacity ratio (V/C) is greater than two-hundredths (>0.02). Following are the significant impacts identified by the traffic analysis conducted as part of this traffic study for each condition. Unless listed, the study intersection is expected to operate at an acceptable LOS, LOS C or better (V/C<0.80). The Existing Condition LOS was included to document LOS based on an existing count.

Existing Conditions (9/96) (Existing East Monte Vista Overcrossing)

Allison / East Monte Vista	LOS D (V/C=0.84)

Existing Conditions 1/97 (Allison Overcrossing and Extension to Browns Valley)

	W/O Centennial Park	With Centennial Park
Allison / East Monte Vista	LOS D (V/C=0.81) *Potentially Significant Impact*	LOS D (V/C=0.85) *Potentially Significant Impact*

Existing (1/97) With Approved Projects

	W/O Centennial Park	With Centennial Park
Allison / East Monte Vista	LOS D (V/C=0.88) *Potentially Significant Impact*	LOS E (V/C=0.91) *Significant Impact*
Browns Valley / Brown	LOS D (V/C=0.85) *Potentially Significant Impact*	LOS D (V/C=0.85) *Potentially Significant Impact*

Year 2010

	W/O Centennial Park	With Centennial Park
Allison / East Monte Vista	LOS E (V/C=0.99) *Significant Impact*	LOS F ((1.05) *Significant Impact*
Browns Valley / Brown	LOS D/E (V/C=0.90) *Potentially Significant Impact*	LOS D/E (V/C=0.90) *Potentially Significant Impact*
Browns Valley / E.Monte Vista	LOS D (V/C=0.89) *Potentially Significant Impact*	LOS D (V/C=0.89) *Potentially Significant Impact*
Browns Valley / North Park D/W	LOS D (V/C=0.89) *Potentially Significant Impact*	LOS D/E (V/C=0.90) *Potentially Significant Impact*
Browns Valley / Allison	*LOS C (V/C=0.71)*	LOS C/D (V/C=0.80) *Potentially Significant Impact*

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CHAPTER 5 CONCLUSIONS

The proposed Centennial Park Master Plan is expected to generate traffic at rates greater than the rates documented in Trip Generation, 5th Edition, published by the Institute of Transportation Engineers. The trip generation was based on the expected level of usage by the major organized users of the proposed park improvements. To provide a conservative estimate of traffic impacts, trip generation was developed for the months when baseball and soccer seasons would overlap. This methodology is expected to generate a conservatively high estimate of the parks trip generation during the PM Peak Hour between 4:00 and 6:00 PM. The traffic analysis was based on an estimated PM Peak Hour trip generation of 255 trips for the proposed improvements, 108 trips for the existing and planned uses, for a total of 363 PM Peak Hour Trips. No organized use is expected during the AM Peak Hour between 7:00 & 9:00 AM, so AM traffic analysis was done.

The traffic analysis shows that the trip generation expected from the proposed improvements to Centennial Park will not have a significant impact on affected intersections. Traffic resulting from cumulative development in the area and throughout the City could cause significant congestion. However, the combination of roadway improvements planned by the City and implementation of the Traffic Mitigation Ordinance will make impacts less than significant.

Allison/East Monte Vista, in the Existing 1/97 condition was found to operate at LOS D with or without the project, V/C = 0.85 and 0.81, respectively. For the Existing Plus Approved Projects condition this intersection was found to operate at LOS E (V/C= 0.91) with the project, and LOS D (V/C=0.89) without the project. This is a significant impact mitigated by traffic stripping and signal modifications that creates additional westbound left turn capacity by revising a through lane to a shared through/left. With this improvement the intersection is expected to operate at LOS C or better through the Existing plus Approved Project condition, with or without the project.

Allison/East Monte Vista in the Year 2010 condition was found to operate at LOS F (V/C= 1.05) with the project, and LOS E (V/C=0.99) without the project. The traffic striping and signalization improvements described above allow this intersection to operate at LOS D with (V/C=0.85) or without (V/C=0.83) the project. To mitigate this intersection to LOS C, or better, would require the addition of a second westbound left turn and a third northbound through lane. The widening required to provide these lanes would significantly impact the private property on the northeast, southeast, and northwest corners of Allison and East Monte Vista. The City has three (3) options a) with City Council approval this intersection could be allowed to operate at LOS D should Council determine findings are consistent with General Plan Policy 6.1 G-2, b) include the roadway improvements as described above, and necessary right-of-way acquisition, in the next update of the Development Impact Fee, or c) require that future project(s) that cause this intersection to operate at LOS D to construct the required improvements.

Browns Valley/ Brown in the Existing Plus Approved Projects condition was found to operate at LOS D (V/C= 0.85) with or without the project. In the year 2010 condition at LOS D/E (V/C=0.90). This is a potentially significant impact mitigated by the addition of one northbound and one southbound through lane on Browns Valley Parkway. This widening is included in the Development Impact Fee Program. The City shall continue to monitor this intersection and administer the Development Impact Fee program and provide this widening prior to the LOS changing from D to E.

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Browns Valley/East Monte Vista in the Year 2010 condition was found to operate at LOS D (V/C= 0.89) with or without the project. This is a potentially significant impact of cumulative development that is improved to LOS D (V/C=0.86) by providing the revision of the northbound through lane to a shared through/left. Improvements beyond this are not practical because I-80 and East Monte Vista are so close together at this location. Council shall determine that this intersection is consistent with General Plan Policy 6.1 G-2 to allow this intersection to operate at LOS D in the Year 2010, or limit future development that has a significant impact (V/C change >0.02) on this intersection and causes LOS to change from C to D.

Browns Valley/North Park Driveway in the Year 2010 condition was found to operate at LOS D/E (V/C= 0.90) with the project, and LOS D (V/C=0.89) without the project. This intersection is operating at a potentially significant level, but the projects has an less than significant impact since it impacts the V/C by less-than two-hundredths (<0.02). Also the intersection operates at LOS D with or without the project. This impact is mitigated by providing an additional northbound and southbound through lane on Browns Valley Parkway. This widening is included in the Development Impact Mitigation Program. Therefore to mitigate this potentially significant impact the City shall monitor this intersection and administer the Development Impact Fee Program to provide this widening prior to LOS changing from D to E.

Browns Valley/Allison in the Year 2010 condition was found to operate at LOS C/D (V/C= 0.80) with the project, and LOS C (V/C=0.71) without the project. This is on the verge of becoming a potentially significant impact since the LOS is on the verge of changing to D and the impact of the project is a change to V/C greater than two-hundredths (>0.02). Adding a southbound right turn lane on Browns Valley Parkway would maintain a LOS C at this intersection with the project. To mitigate this potentially significant impact the City shall monitor this intersection and include this additional southbound right turn lane in the Development Impact Fee Program project that completes the widening of Browns Valley to four lanes south of Brown Street.

The Development Impact Fee Program, in conjunction with the Annual Growth Audit, provide the mechanism to monitor and fund the mitigations required to mitigate all study intersections to acceptable levels of service, with the exception of accepting LOS D at Browns Valley/East Monte Vista in the Year 2010 due to physical constraints. With City Council acceptance of LOS D at Browns Valley /East Monte Vista, or a determination to limit future development causing the Existing Plus Approved Project LOS C (V/C=0.76 Existing plus Approved Projects with the project) to change from LOS C to D, acceptable levels of service can be maintained at all study intersections.

The development of the Centennial Park Master Plan does not require mitigation in addition to the planned improvements included in the Development Impact Fee Program, or revisions to existing traffic striping and signal improvements needed to mitigate cumulative development. Therefore development of the Centennial Park Master Plan was found to have a less than significant impact on transportation and circulation based on the 1990 Vacaville General Plan transportation policies.

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Notice of Completion *Supplementary Document M*

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

See NOTE below
SCH # 97022038

Project Title: Centennial Park Masterplan
Lead Agency: City of Vacaville — Contact Person: Wendy Thomas
Street Address: 650 Merchant Street — Phone: (707) 449-5140
City: Vacaville, CA — Zip: 95688 — County: Solano

Project Location
County: Solano — City/Nearest Community: City of Vacaville
Cross Streets: Brown Street/Browns Valley Parkway — Zip Code: 95688 — Total Acres: 135
Assessor's Parcel No. 129-220-03, 04, 05 — Section: ____ — Twp. 6N — Range: 1W — Base: Mt. Diablo
Within 2 Miles: State Hwy #: I-80 — Waterways: Pine Tree Creek, Horse Creek
Airports: Nut Tree — Railways: ____ — Schools: Browns Valley Elementary

FILED FEB 14 1997 STATE CLEARINGHOUSE

Document Type
CEQA: ☐ NOP ☐ Supplement/Subsequent ☐ Early Cons ☐ EIR (Prior SCH No.) ☒ Neg Dec ☐ Other ☐ Draft EIR
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other

Local Action Type
☐ General Plan Update ☒ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☒ Master Plan ☐ Planned Unit Development ☐ Site Plan
☒ Rezone ☐ Prezone ☒ Use Permit ☐ Land Division (Subdivision, Parcel Map, Tract Map, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other

Development Type
☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational ____
☒ Recreational City Park
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type ____
☐ Mining: Mineral ____
☐ Power: Type ____ Watts ____
☐ Waste Treatment: Type ____
☐ Hazardous Waste: Type ____
☐ Other: ____

Project Issues Discussed in Document
☒ Aesthetic/Visual ☐ Agricultural Land ☐ Air Quality ☐ Archeological/Historical ☐ Coastal Zone ☐ Drainage/Absorption ☐ Economic/Jobs ☐ Fiscal
☒ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☒ Geologic/Seismic ☐ Minerals ☒ Noise ☐ Population/Housing Balance ☐ Public Services/Facilities ☐ Recreation/Parks
☐ Schools/Universities ☐ Septic Systems ☐ Sewer Capacity ☐ Soil Erosion/Compaction/Grading ☐ Solid Waste ☐ Toxic/Hazardous ☒ Traffic/Circulation ☐ Vegetation
☐ Water Quality ☐ Water Supply/Groundwater ☒ Wetland/Riparian ☒ Wildlife ☐ Growth Inducing ☒ Landuse ☐ Cumulative Effects ☐ Other

Present Land Use/Zoning/General Plan Use Park, Vacant/Industrial Park-Policy Plans, Agricultural/Business Park, Public Park, Private Recreation

Project Description See attachment A

97022038

State Clearinghouse Contact: Ms. Angel Howell (916) 445-0613

State Review Began: 2-14-97
Dept. Review to Agency 3-10
Agency Rev to SCH 3-14
SCH COMPLIANCE 3-17

Please note SCH Number on all Comments

97022038

Please forward late comments directly to the Lead Agency

AQMD/APCD____ (Resources 2/15)

97022038

Project Sent to the following State Agencies

- X Resources
- ____ Boating
- ____ Coastal Comm
- ____ Coastal Consv
- ____ Colorado Rvr Bd
- X Conservation
- X Fish & Game # 3
- ____ Delta Protection Commission
- ____ Forestry
- X Parks & Rec/OHP
- ____ Reclamation
- ____ BCDC
- X DWR
- ____ OES

Bus Transp Hous
- ____ Aeronautics
- ____ CHP
- X Caltrans # 4
- X Trans Planning
- ____ Housing & Devel

Health & Welfare
- ____ Dept. of Health
- ____ Medical Waste

State/Consumer Svcs
- ____ General Services

Cal/EPA
- X ARB
- ____ CA Waste Mgmt Bd
- ____ SWRCB: Grants
- ____ SWRCB: Delta
- X SWRCB: Wtr Quality
- ____ SWRCB: Wtr Rights
- X Reg. WQCB # 2
- ____ DTSC/CTC Sac.

Yth/Adlt Corrections
- ____ Corrections

Independent Comm
- ____ Energy Comm
- ____ NAHC
- ____ PUC
- ____ Santa Mn Mtns
- X State Lands Comm
- ____ Tahoe Rgl Plan
- ____ Other:

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File Number 96-177

NOTICE OF DETERMINATION

FILED

March 31, 1997

Michael D. Johnson, Clerk of the Board of Supervisors of the County of Solano, State of California

By [illegible]

(County Clerk Use Only)

TO: County Clerk, County of Solano
Hall of Justice, North Wing
Union Avenue
Fairfield, CA 94533

FROM: City of Vacaville
Community Development Department
650 Merchant Street
Vacaville, CA 95688

SUBJECT: Filing of Notice of Determination in Compliance with Section 21108 or 21152 of the State of California Public Resources Code.

PROJECT TITLE: Centennial Park Master Plan and Mitigated Negative Declaration, File 96-177

STATE CLEARINGHOUSE NUMBER (if submitted)	CONTACT PERSON	TELEPHONE
97022038	Wendy Thomas	(707) 449-5140

PROJECT LOCATION: Property is bounded by Browns Valley Parkway to the southwest, the Putah South Canal and Nut Tree Airport to the east, the Vacaville-Golden Hills Business Park to the north and Ridgeview to the west, APNs 129-220-03 through 05, Vacaville, Solano County.

PROJECT DESCRIPTION: The existing park improvements consist of the following: four baseball fields for youth leagues with a restrooms/concessions building, 2 small, synthetic turf soccer fields for practice and training, one synthetic turf soccer field, and 102 parking spaces.

Previously approved, but not yet constructed facilities consists of four tennis courts and 88 parking spaces (58 striped and 30 overflow spaces).

Phase one of the proposed improvements will include a 76,200 square foot gymnasium building (Homefield). The gymnasium portion will contain 68,000 square feet and provide space for two indoor soccer fields, four full-size basketball court and one half court. These court areas may also be used for volleyball. No fixed spectator seating is proposed. The remaining 8,000 square feet will be used for various accessory uses including offices, retail, snack bar, lobby, child care, storage and restrooms. The hours of operation will be from 6 a.m. to midnight seven days a week. The facility will be privately operated under a long-term ground lease with the City. The initial lease is for fifteen years with two five year renewal options.

New improvements proposed by the master plan include: nine, full-size soccer fields, 2 small, synthetic turf soccer fields for practice and training, one volley ball/beach soccer field, a modular office building (less than 1,000 square feet) for Vacaville Youth Soccer League (V.Y.S.L.), playground equipment and group picnic shelters, 2.5 miles of walking trails, stormwater detention basins, passive outdoor areas that may consist of a 9-hole executive golf course and 418 parking spaces (excluding any parking needed for the golf course). The three eastern most soccer fields as well as the soccer fields south of the Homefield Building will be illuminated. The outdoor soccer fields will be used from 6 a.m. to 10 p.m. Ten to twelve soccer tournaments may take place over the course of a year once all the fields are installed.

Total number of parking spaces at build out would be 608.

The improvements to the park are to be phased over the course of 13 years. The first phase will be the construction of the Homefield Building and parking lot and the park infrastructure including roadways, water lines, sewer lines, and detention basins.

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The City of Vacaville approved the project on March 25, 1997 and has determined the following:

1. The project will not have a significant effect on the environment.

2. A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Conditions of approval were made a condition of the project's approval.

4. A Statement of Overriding Considerations was not adopted for this project.

The environmental assessment for the project area is available to the general public and may be obtained at the above location.

THIS DOCUMENT POSTED FROM

3/31/97 TO _____

_____

DEPUTY CLERK OF THE BOARD

WENDY THOMAS

Associate Planner
City of Vacaville

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CITY OF VACAVILLE COMMUNITY DEVELOPMENT DEPARTMENT
CURRENT PLANNING DIVISION
NEGATIVE DECLARATION
ENVIRONMENTAL ASSESSMENT (96-177)

PROJECT TITLE:

Centennial Park

LEAD AGENCY NAME AND ADDRESS:

City of Vacaville
Current Planning Division
650 Merchant Street

CONTACT PERSON:

Wendy Thomas, Associate Planner
707-449-5140

ADDRESS OF APPLICANT:

City of Vacaville
Community Services
40 Eldridge Avenue, Suite 11
Vacaville, CA 95688

PROJECT LOCATION:

Centennial Park is bounded by Browns Valley Parkway to the southwest, the Putah South Canal and Nut Tree Airport to the east, the Vacaville-Golden Hills Business Park to the north and Ridgeview to the west.

Assessor's Parcel Numbers: 129-220-03 through 05

PROJECT DESCRIPTION:

The existing park improvements consist of the following: four baseball fields for youth leagues with a restrooms/concessions building, 2 small, synthetic turf soccer fields for practice and training, one synthetic turf soccer field, and 102 parking spaces.

Previously approved, but not yet constructed facilities consists of four tennis courts and 88 parking spaces (58 striped and 30 overflow spaces).

Phase one of the proposed improvements will include a 76,200 square foot gymnasium building (Homefield). The gymnasium portion will contain 68,000 square feet and provide space for two indoor soccer fields, four full-size basketball court and one half court. These court areas may also be used for volleyball. No fixed spectator seating is proposed. The remaining 8,000 square feet will be used for various accessory uses including offices, retail, snack bar, lobby, child care, storage and restrooms. The hours of operation will be from 6 a.m. to midnight seven days a week. The facility will be privately operated under a long-term ground lease with the City. The initial lease is for fifteen years with two five year renewal options.

New improvements proposed by the master plan include: nine, full-size soccer fields, 2 small, synthetic turf soccer fields for practice and training, one volley ball/beach soccer field, a modular office building (less than 1,000 square feet) for Vacaville Youth Soccer League (V.Y.S.L.), playground equipment and group picnic shelters, 2.5 miles of walking trails, stormwater detention basins, passive outdoor areas that may consist of a 9-hole executive golf course and 418 parking spaces (excluding any parking needed for the golf course). The three eastern most soccer fields as well as the soccer fields south of the Homefield Building will be illuminated. The outdoor soccer fields will be used from 6 a.m. to 10 p.m. Ten to twelve soccer tournaments may take place over the course of a year once all the fields are installed.

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Total number of parking spaces at build out would be 608.

The improvements to the park are to be phased over the course of 13 years. The first phase will be the construction of the Homefield Building and parking lot and the park infrastructure including roadways, water lines, sewer lines, and detention basins.

CITY OF VACAVILLE PROJECT PERMITS AND APPROVALS;

The environmental analysis may be used for concurrent as well as subsequent approvals related to the project. Below are the expected permits and/or approvals that would be needed to carry out the project. Not all of the approvals and/or permits are considered discretionary and therefore may qualify for an exemption from the CEQA requirements. Concurrent or subsequent permits/approvals may include, but are not limited to:

City Council

- General Plan Amendment to change land use designation from Business Park to Public Park and revise language in Parks and Recreation Element;
- Rezoning of the northern portion of the park from Industrial Park - Policy Plan to A-20, Agricultural;
- Master Plan for park improvements;
- Abandonment of roadway easements; and
- Amendment to Comprehensive Park and Recreation Plan.

Planning Commission

- Conditional Use Permit to allow a public facility in an agricultural district.

Redevelopment Agency

- Disposition and Development Agreement (DDA), that includes a long-term ground lease; and
- Redevelopment loan to construct park infrastructure.

Community Services Commission (advisory action to City Council)

- Master plan for park, and
- Amendment to Comprehensive Park and Recreation Plan.

Housing and Redevelopment Commission (advisory action to Redevelopment Agency)

- Disposition and Development Agreement (DDA), that includes a long-term lease, and
- Redevelopment loan to construct park infrastructure.

Community Development Department

- Parcel maps;
- Grading permits; and
- Ministerial permits such as building permits, occupancy permits, encroachment permits.

EXISTING CONDITIONS:

The 135 acre site currently contains four baseball fields, parking for 102 vehicles, restroom and concession building, two hobby land artificial turf soccer fields, one 28,000 square foot synthetic turf soccer field. Approximately five acres of the site was formerly a landfill for household waste for the City of Vacaville. Other than the improvements noted, the landfills and the rest of the park site is covered with grass during the summer. During the winter seasonal wetland occur in areas of the site which

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contain inactive settling ponds which were part of a sewage treatment plant once located on the site. A small pocket of wetlands is located in the northeast corner of the park along the existing service road. Three creeks flow across the site from west to east. The northern most creek is a tributary to the South Fork of Horse Creek that runs through the middle of the site. Pine Tree Creek runs along the south property line of the park. An 18 inch sewer main runs between Pine Tree Creek and Browns Valley Parkway. A sewer main also runs north/south roughly parallel to the east property line approximately 450' west of the east property line.

GENERAL PLAN DESIGNATION: Business Park, Public Park and Private Recreation

ZONING: IP-PP, Industrial Park Policy Plan and A-20, Agricultural

SURROUNDING LAND USES AND SETTING:

Surrounding land uses are: North, vacant land within the Vacaville Golden Hills Industrial Park; South, vacant agricultural land; East, Putah South Canal and Nut Tree Airport; and West, abandoned Southern Pacific railroad right of way and single family residential development and agricultural land.

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED: Wetland permits: Army Corps of Engineers, , US Department of Interior Department of Fish and Wildlife, **Stream bed Alteration Permit:** California Department of Fish and Game, **Finding of Consistency with Airport Land Use Plan:** Solano County Airport Land Use Commission, **Notice of Construction:** Federal Aviation Administration, **Grading:** Solano Irrigation District, **Letter of Map Amendment (LOMA):** Federal Emergency Management Agency.

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

☐	Land Use and Planning	☐	Hazards
☐	Population and Housing	☐	Noise
☐	Geological Problems	☐	Public Services
☐	Water	☐	Utility and Service Systems
☐	Air Quality	☐	Aesthetics
☐	Transportation/Circulation	☐	Cultural Resources
☐	Biological Resources	☐	Recreation
☐	Energy and Mineral Resources		

DETERMINATION:

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A 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 significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless

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mitigated." 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, there WILL NOT be a significant effect in this case because all potentially significant effects: a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Signature R. Rowland Date: February 14, 1997

Printed name Ron Rowland

ENVIRONMENTAL ASSESSMENT:

Scope of the Initial Study

In accordance with 21083.3 of the California Environmental Quality Act, this Initial Study will analyze only the project-specific impacts of the policy plan and related subsequent approvals. This scope of environmental assessment is appropriate due to the following reasons: (a) an environmental impact report has been certified for the City's general plan, (b) no new significant impacts have been identified which were not addressed in the previously prepared General Plan EIR, and (c) development policies and standards have been adopted that will substantially mitigate environmental effects. The supporting evidence for this scope of analysis is described below.

Findings That Mitigation Measures In General Plan EIR Will Be Implemented. The scope of the Initial Study takes into consideration the provisions of Sections 21083.3(b) and (c) of the California Environmental Quality Act. Those provisions state:

> "(b) If a development project is consistent with the general plan of a local agency and an environmental impact report was certified with respect to that general plan, the application of this division to the approval of that development project shall be limited to the effects on the environment which are peculiar to the parcel or the project and which were not addressed as significant effects in the prior environmental impact report, or which substantial new information shows will be more significant than described in the prior environmental impact report."
>
> "(c) Nothing in this section affects any requirements to analyze potentially significant off-site impacts and cumulative impacts of the project not discussed in the prior environmental impact report with respect to the general plan. However, all public agencies with authority to mitigate the significant effects shall undertake or require the undertaking of any feasible mitigation measures specified in the prior environmental impact report relevant to a significant effect which the project will have on the environment, or, if not, then the provisions of this section shall have no application to that effect. The lead agency shall make a finding, at a public hearing, as to whether those mitigation measures will be undertaken."

The Vacaville City Council certified an environmental impact report for the City's General Plan on August 21, 1990. Through the adoption of the Resolution No. 1990-N-6, the City Council identifies the significant effects of the General Plan, mitigation measures and statements of overriding consideration. The text which follows lists the adopted general plan mitigation measures which are applicable to the project and states whether, or to what extent those measures are being undertaken.

Findings regarding these measures will be made at the public hearing which considers the project.

1. Traffic mitigation measures of the General Plan EIR are being implemented as follows:

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a. funding for the construction of improvements for arterials and freeway interchanges are provided by the City's traffic impact fee, which is collected at the time of issuance of a building permit;

b. right-of-way for future roadways is being secured, through adoption of plan lines, conditions of approval for subdivision maps and development applications, assessment and benefit districts, and separate acquisition by the City or Redevelopment Agency;

c. traffic counts and an analysis of key intersections are performed each as part of the Growth Audit, mandated by the City's Planned Growth Ordinance;

d. the "Standard Specifications for Public Improvements", adopted by the City Council, restricts the location of new driveways within 60 feet of an intersection; and

e. the City has prohibited on-street parking and restricted driveway access on all new arterial streets in order to increase their traffic capacity and promote safety of turning movements.

f. the City's Traffic Mitigation Ordinance has provisions for the preparation of traffic studies and requirement for roadway improvements under the conditions specified by that ordinance

2. The airport safety measures of the General Plan EIR are being implemented through the adopted Nut Tree Airport Compatibility Standards and the review for conformity with the standards through the approval of each design review, conditional use permit, or other similar application.

3. The air quality mitigation measures of the General Plan EIR are being implemented through the City's Trip Reduction Ordinance.

4. The noise mitigation measures of the General Plan EIR are being implemented by ensuring that each development application complies with the standards and policies of the Noise Element of the General Plan and the Performance Standards of the Land Use and Development Code.

5. The water supply and distribution mitigation measures of the General Plan EIR are being implemented as follows:

a. additional well sites have been acquired and new wells constructed to replace old wells to provide better use of groundwater;

b. the diatomaceous earth ("DE") water treatment plant has been expanded and improved for increased water treatment capacity;

c. the City collects a water connection fee to fund the construction of water distribution and treatment facilities;

d. a 5 million gallon water reservoir has been constructed and a second reservoir is being designed;

e. development applications are reviewed to ensure that adequate water supply and pressure is available; and

f. the City has adopted the Planned Growth Ordinance which provides the authority to restrict the rate of residential growth such that it corresponds to the City's ability to provide public services, including water for fire protection and domestic use.

6. The wastewater collection and treatment mitigation measures of the General Plan EIR are being implemented as follows:

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a. the City collects a wastewater connection fee to fund the construction of wastewater collection and treatment facilities;

b. development application are reviewed to ensure that adequate wastewater collection facilities are available;

c. the City has adopted the Planned Growth Ordinance which provides the authority to restrict the rate of residential growth such that it corresponds to the City's ability to provide public services, including wastewater collection and treatment; and

d. the City has received an EDA grant to assist in the cost of constructing new sewer trunk mains.

7. The drainage mitigation measures of the General Plan EIR are being implemented by the adoption of development impact fees for drainage conveyance and drainage detention; the fees will be used to construct detention basins, channel improvements and storm pipes throughout the City.

8. The biotic mitigation measures of the General Plan EIR are being implemented as follows:

a. the policies of the General Plan with respect to creek protection and preservation of steep slope and hillside areas are implemented through the review of each subdivision map and development application;

b. permitting agencies, such as Fish and Game and Corps of Engineers, review development applications and comment or use their administrative authority to minimize impact to biotic resources; and

c. the City has adopted a Creekways Plan to preserve and protect these areas.

Finding That Previously Adopted Standards or Policies Which Will Mitigate Impacts Will Be Required of the Project. Section 21083.3(d) of the California Environmental Quality Act states that:

> "An effect of the project on the environment shall not be considered peculiar to the parcel or the project, for purposes of this section, if uniformly applied development policies or standards have been previously adopted by the city or county, with a finding based on substantial evidence, which need not include an environmental impact report, that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect."

The City of Vacaville has adopted numerous standards and policies which have the effect of mitigating potentially significant environmental effects. Those standards and policies which are applicable to this project are identified below; each item also includes a statement regarding the manner in which potential environmental effects are avoided or minimized.

1. In accordance with the Uniform Building Code (UBC), as adopted by the City, a geotechnical report shall be prepared and submitted for review and approval by the City's Building Official with each building permit application for subsequent development within the project. In addition, the construction plans for each building permit will be reviewed and approved in accordance with the UBC's seismic requirements. Compliance with these adopted building codes will minimize the risk of geologic and seismic hazards to employees and customers.

2. Subsequent development projects will be required to conform with the City's Trip Reduction Ordinance (TRO), to reduce the total number of vehicle trips, through such measures as car and van pools, bicycles, and transit.

3. In accordance with Chapter 11 of the Vacaville Municipal Code, all subsequent development shall pay development impact fees at the time of issuance of building permits; these fees will be used by the City

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to pay for the construction of various capital improvements such as water treatment plants, wastewater treatment plants, sewer trunk lines, water reservoirs and main lines, major streets and freeway interchanges, police and fire facilities and general government buildings. Compliance with this ordinance minimizes the impact of cumulative development with respect to the demand for public services.

4. Building permit applications will be routed to the Yolo/Solano Air Quality Management District for its review and approval. Construction activities and operation of commercial businesses shall be conducted in accordance with District regulations; these include dust control strategies during grading.

5. No development application may be approved by the City except in compliance with the City's Traffic Mitigation Ordinance. That ordinance, adopted by the City Council to implement the General Plan, requires preparation of traffic studies for projects generating more than 100 peak hour trips, authorizes imposition of mitigation measures such that affected intersections will operate at Level of Service "D" or better, and authorizes the City to deny projects when affected intersections would operate at Level of Service "E" or "F".

6. Each development application shall comply with the County's Congestion Management Plan, which addresses traffic impacts to freeways and major routes of county-wide importance.

7. Subsequent development applications are required to provide adequate on-site parking in accordance with the Zoning Ordinance and the "Parking and Loading Design Guidelines."

8. All subsequent development shall comply with the requirements of the Source Reduction and Recycling Element. Compliance with this element reduces the amount of solid waste entering the landfill by encouraging recycling and source reduction.

9. All landscaping installed must be in accordance with the "Water Efficient Landscaping Regulations" adopted by the City Council. This regulation serves to reduce the water demand by cumulative development throughout the City.

10. Grading may occur only in accordance with the grading regulations contained in Division XIX of the Land Use and Development Code. This Division provides for the City's plan check and inspection of grading and authorizes the City to require, as needed, the submittal of geotechnical reports and inspection of grading by engineering geologists and soils engineers.

Scope of Environmental Assessment

This environmental assessment considers potential impacts that were not specifically analyzed by the General Plan EIR, which include: traffic impacts to adjacent streets and intersections, compatibility with existing adjacent residences with respect to noise and lighting, impact to wetlands and biotic resources, on-site soil conditions, demand for public services and facilities, and parking demands. In each case where a potentially significant impact is identified, mitigation measures or project features are identified which mitigate any potential impacts to a level of less than significant.

All documents cited are available for public review at the following address: Community Development Department, 650 Merchant Street, Vacaville, California, 95688.

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ENVIRONMENTAL IMPACTS:

I. LAND USE PLANNING. Would the Proposal:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with general plan designation or zoning?	☐	☒	☐	☐
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	☐	☒	☐	☐
c) Be incompatible with existing land use in the vicinity?	☐	☒	☐	☐
d) Affect agricultural resources or operations?	☐	☐	☒	☐
e) Disrupt or divide the physical arrangement of an established community?	☐	☐	☒	☐

The proposed boundaries of the park do not currently correspond to the boundaries of the General Plan designation for Public Park. When the General Plan was adopted the City owned only the southern portion of the site and later acquired the remainder of the site to be used as additional park area. The portion of the site that is designated as Business Park was once a part of the KirkPatrick Policy Plan. The Policy Plan was amended in July, 1996, and the boundary of the plan was adjusted to exclude the northern portion of the park. The City Council has initiated a change in the general plan designation for the portion of the park that is currently designated as Business Park and Private Recreation to Public Park. The General Plan amendment is being processed concurrently with the Rezoning and Conditional Use Permit.

The City of Vacaville Comprehensive Parks, Recreation and Open Space Master Plan is internally inconsistent in its designation of the classification of Centennial Park, formally known as Allison Park. The Master Plan lists the park as a Community Park, however, the development program designates the site as a City Park. At the time of adoption of the Recreation Master Plan the park size was 14 acres. The Community Park designation is for parks of 12-74 acres that are designed to serve a portion of the City's population living within a 1 to 2 mile radius of the facility. The parks are to provide facilities such as lighted ball fields, areas and buildings for civic events and organized sports and athletics. The Master Plan describes a City Park as a facility that is designed to service the entire City with large specific-use areas and with active recreation facilities. Centennial Park will service the entire City and as such is a City Park; however, the proposed uses for the park are consistent with the uses allowed in a Community Park. The adoption of the Centennial Park Master Plan will require that the Comprehensive Parks, Recreation and Open Space Master Plan be amended during 1997 to designate this site as a City Park through out the Plan and to amend the uses in the City Park to make them consistent with what will be provided on site.

The City of Vacaville General Plan Parks and Recreation Element designates Allison Park as Urban Open Space in Table 4-1, Inventory of Parks and Recreation Centers; however, the General Plan also designates the park as a City Park in Table 4-3, Proposed Parks, and goes on to describe the facility on page 9 as a City Park. Clearly the inconsistency between the two documents requires the amendment of the Comprehensive Parks, Recreation and Open Space Master Plan.

The General Plans as well as the Comprehensive Parks, Recreation and Open Space Master Plan requires that the City provide 1.7 acres of Community Park per 1,000 residents and 1.0 acres of City Park per 1,000 residents. The California Department of Finance estimates Vacaville's household population as of January 1, 1996, to be 76,103. Based on this estimate, the City needs 76 acres of City Park and 129 acres of Community Park. The designation of Centennial Park as a City Park, clearly meets the population to park area ratio for City Parks; however, it leaves the Community Park ratio short by providing only 104 acres of the 129 acres required by the General Plan.

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The application to change the land use designation for the northern portion of Centennial Park will help to decrease the conflict in land use designations by changing the current land use designation from Business Park to Public Park. Placing recreational land uses adjacent to residential land uses is an accepted land planning practice.

The park site is not currently used for agricultural purposes and will not disrupt any existing land use pattern.

Mitigation: By the end of 1997 the City shall amend the Parks and Recreation Master Plan to make the text and table consistent with changing the intended use as a City Park.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. POPULATION AND HOUSING. Would the Proposal:				
a) Cumulatively exceed official regional or local population projections?	☐	☐	☒	☐
b) Induce substantial growth in an area either directly or indirectly?	☐	☐	☐	☒
c) Displace existing housing, especially affordable housing?	☐	☐	☐	☒

The creation of a park on this vacant land is not expected to have an impact on the population of the City. The General Plan projects a buildout of residential area but the industrial/commercial areas won't fully develop for several decades. The project will not have any effect on future population. Because the site is vacant the proposed park will not displace any existing housing.

III. GEOLOGIC PROBLEMS. Would the proposal result in or expose people to potential impacts involving:				
a) Seismic ground shaking?	☐	☐	☒	☐
b) Seismic ground failure, including liquefaction?	☐	☐	☒	☐
c) Landslides or mud flows?	☐	☐	☒	☐
d) Erosion, changes in topography or unstable soil conditions from excavation, grading or fill?	☐	☒	☐	☐
e) Subsidence of land?	☐	☐	☒	☐
f) Expansive soils?	☐	☐	☒	☐
g) Alteration of unique geologic or physical feature?	☐	☐	☒	☐

Vacaville has a limited exposure to ground shaking that results from faults located outside of the City. In addition, the park is located in an area that has moderate susceptibility to liquefaction. (Vacaville General Plan, Figure 9-1). Although there are no known earthquake faults in the immediate vicinity of the City (North Village EIR, page 4.10-4), to avoid exposing people and property to seismic hazards, the indoor soccer building will be designed to conform to the most recent seismic safety standards of applicable state regulations and the uniform building code. The submittal requirements for a building permit application include a soils report. The recommendations of the report would be incorporated into the final design of the project, and would define the foundation systems, bearing capacity, settlement expectations and subgrade recommendations. Compliance

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with the mitigation measures will mitigate the potential impacts of the exposure that does occur to a level of less than significant.

In order to accommodate the proposed playfields, Homefield building and the needed detention basins grading will need to occur on site. Grading will include the addition of soil to the building pad in order to meet the required finish floor elevation required by the building department to meet Federal Emergency Management Agency (FEMA) requirements. The soils for this will be taken from other areas of the site which are being excavated to provide stormwater detention basins where Horse Creek and Pine Tree Creek meet the Putah South Canal. Erosion due to grading will be controlled through a mitigation plan to reduce erosion which will be approved by the Building Division prior to the issuance of a grading permit.

The site is relatively flat with the exception of the inactive land fill site. The lack of significant geologic features of the site will preclude any grading on the site from having any impact on geologic features.

Mitigation: The City shall prepare a rough, master grading plan for the site prior to the approval of the initial grading permit.

At the time of application for a building permit, an applicant shall submit a detailed soils report prepared by a geotechnical engineer, for the review and approval by the Building Official. The report shall be prepared in compliance with the Uniform Building Code, as may be amended by the City, and will define each building's proper foundation system, bearing capacity limits, settlement expectations, and building subgrade recommendations.

As a condition of approval of a grading permit, the City shall require that the grading operations include methods to reduce the amount of soil erosion. These methods, as determined by the City Engineer, shall include but are not limited to the following: watering site during grading for dust control, covering stockpiles of dirt with tarps, and re-vegetating any graded areas not proposed for immediate development.

The City Engineer shall review grading permits to ensure that the building pad elevation would allow the finished floor elevation of any building to be above the elevation of the 100-year flood plain, as currently shown on the FEMA flood plain map or as may be subsequently amended by FEMA through approval of a letter of map amendment.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. WATER. Would the proposal result in:				
a) Changes in absorption rates, drainage patterns or the rate and amount of surface runoff?	☐	☒	☐	☐
b) Exposure of people or property to water related hazards such as flooding?	☐	☐	☒	☐
c) Discharge into surface waters or other alterations of surface water quality?	☐	☒	☐	☐
d) Changes in the amount of surface water in any water body? Runoff into Pine Tree Creek Runoff into Horse Creek	☐	☐	☒	☐
e) Changes in currents, or the course or direction of water movements?	☐	☐	☒	☐

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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
f) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of recharge capability?	☐	☐	☒	☐
g) Altered direction or rate of flow of groundwater?	☐	☐	☒	☐
h) Impacts to groundwater quality?	☐	☒	☐	☐
i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?	☐	☐	☐	☒

Based on a review of FEMA maps, the east half of the park, running north to south is in the flood zone. The portion of the park running parallel to the Putah South Canal west for approximately 150' and in the southeast corner of the site is within the special flood hazard zone inundated in a 100 year flood. The City is requesting a Letter of Map Amendment (LOMA) from FEMA which requests that a portion of the park be removed from the special flood hazard zone due to the elevation datum showing that flood waters would overflow the canal before flooding the westerly portion of the site. If the LOMA is approved, the Homefield Building will be located outside of the special flood hazard zone.

Construction of the loop road, parking areas and building will result in a minor increase in run off of storm water from the site. The detention basins proposed for Horse Creek and Pine Tree Creek will help to reduce flooding which is currently occurring on residential streets to the West of the site. Brown Street currently floods during heavy rains. The improvements to the creek and storm water detention basins will help control flooding. Improvements to Horse Creek will help to control storm water run off from the residential developments in Browns Valley.

The project will not result in a significant impact to the quality of surface waters. The land uses allowed within a park do not include those that store, handle or use large amounts of hazardous materials that would make their way into the storm drainage system. During the construction phase of the project, erosion could occur in graded areas; this sediment could flow through the City's stormwater drainage system into Horse Creek and/or Pine Tree Creek. Mitigation measures will help to reduce this impact to a level of less than significant.

One ground water sample was taken on the site in 1994 from a single well that produced water. The water sample produced levels below detection limits for all Chlorinated Volatile Organics, Semi-Volatile Organics, Biological Oxygen Demand and Chemical Oxygen Demand. Other general mineral and metals analyses revealed no unusually high concentrations for the parameters tested. Although ground water will not be used as a source of water for irrigation or service for the building, the existing wells should be monitored to determine the ongoing effect of the inactive land fill on ground water.

Mitigation: The City Engineer shall review building permit applications to ensure that the finished floor elevation of any building will be above the elevation of the 100-year flood plain, as required by the City's Flood Plain Ordinance. This elevation shall be as currently shown on the FEMA flood plain map or as may be subsequently amended by FEMA through approval of a letter of map amendment submitted by the City.

The City will conduct a SWAT test to determine effect of rain filtering through the landfill on ground water. If the SWAT determines that the landfill is contaminating groundwater, the landfill will be capped per the requirements of the Water Resources Board when development of the landfill occurs.

If needed, development the athletic fields as detention basins to effectively handle existing and added storm water.

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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. AIR QUALITY. Would the proposal:				
a) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☒	☐	☐
b) Expose sensitive receptors to pollutants?	☐	☐	☒	☐
c) Alter air movement, moisture, or temperature, or cause any change in climate?	☐	☐	☒	☐
d) Create objectionable odors?	☐	☐	☒	☐

The development of the site will result in an increase in air pollution due to grading and earth moving as a part of construction. The effects of construction activities will be an increase in dustfall and locally elevated levels of particle matter downwind of the project site. Impacts due to construction vary widely due to wind conditions, types of soil and the extent of construction. The highest potential for dust occurs during late spring, summer and early fall when soil is dry. However, construction dust is a temporary impact that can be mitigated to a level of less than significant.

Air pollution in the form of carbon monoxide will increase due to construction equipment and the increase in traffic on local roadways due to automobile trips generated by the activities on site. Vacaville is a non-attainment area for ozone (General Plan EIR, page 4-35) and particulate matter, pm10 (North Village EIR, page 4.4-7.) Additional vehicle trips generated by this development contribute to the air emissions and the increase in ozone. Cumulatively, the effect of additional vehicle trips is to reduce air quality. Although air pollution levels for Vacaville exceed Federally mandated levels, the State does not deem these levels unacceptable. Per California regulations, air quality is measured cumulatively on a district wide basis. The project is located within the Yolo-Solano Air Pollution Control District. The district, as a whole, does not exceed state or federal air quality standards. Although the park will be generating some new automobile emissions, it will also be reducing emissions by providing local facilities which will eliminate the need for residents to drive to the Sacramento area in order to utilize indoor soccer facilities.

Mitigation - Prior to construction, permits from Yolo Solano Air Quality Management District must be obtained and kept current.

VI. TRANSPORTATION/CIRCULATION. Would the proposal result in:				
a) Increased traffic congestion or vehicle trips by more than 100 peak hour trips?	☐	☐	☒	☐
b) Hazards to safety from design features or incompatible uses?	☐	☐	☐	☒
c) Inadequate emergency access or access to nearby uses?	☐	☐	☐	☒
d) Insufficient parking capacity on site or off site?	☐	☐	☒	☐
e) Hazards or barriers for pedestrians or bicyclists?	☐	☒	☐	☐
f) Conflicts with adopted policies supporting alternative transportation?	☐	☐	☒	☐
g) Air traffic impacts?	☐	☐	☒	☐

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The City's General Plan contains several policies to ensure that the traffic impacts caused by new development are mitigated. These policies have been implemented by the adoption of various ordinances and policies, as discussed previously under the scope of the environmental assessment. Assurances that the required improvements will be installed in a timely manner or that severe congestion will be avoided are provided by: (a) City's development impact fee ordinance which requires the payment of a traffic impact fee at the time of issuance of building permits, (b) compliance with the City's Traffic Mitigation Ordinance, which requires preparation of traffic studies for projects generating more than 100 peak hour trips, mitigation measures such that affected intersections will operate at Level of Service "D" or better, and authority to deny projects when affected intersections would operate at Level of Service "E" or "F", (c) compliance with the City's Trip Reduction Ordinance, and (d) compliance with the County's Congestion Management Plan.

A traffic study was prepared by The City of Vacaville Public Works Department, Traffic Engineering Division, dated February 1997, (see Attachment A) to analyze the potential impacts of development on the surrounding street system and intersections levels of service (LOS). The report concluded that the improvements proposed as part of the Traffic Impact Fee (TIF) projects will mitigate potential impacts and that the street segments and intersections in the project vicinity would operate at acceptable levels of service at project buildout. The improvements proposed as a part of TIF improvements for adjacent streets and intersections are summarized below.

The improvements planned through the TIF are: (a) second northbound and southbound lanes on Browns Valley Parkway; (b) revise northbound through lane at Browns Valley and E. Monte Vista to a shared through and left turn lane; and (c) at Allison and E. Monte Vista revise one westbound lane to a through/shared left turn lane (providing a second left turn) and add a northbound through/right turn lane.

The traffic study analyzed traffic volumes along various street segments within the project vicinity, and concluded that the street segments analyzed would operate at satisfactory Levels of Service ("LOS"). The goal of the General Plan is that all major intersections will operate at LOS "C" or better; as an interim condition, LOS "D" is also considered satisfactory.

The study analyzed six intersections using the development scenario of full development of the park and installation of TIF improvements to determine levels of service projected for the year 2010:

Intersection	Level of Service
Browns Valley Parkway & Brown Street	B
Allison & E. Monte Vista	C
Browns Valley & E. Monte Vista	D
I-80 Westbound & E. Monte Vista	A
Browns Valley & Allison	C/D
Browns Valley & Centennial Park North Driveway	A

Given the fact that these projected levels of service comply with city standards and the absence of congestion created by project traffic, the impact of additional traffic from the park on these intersections is not considered a significant impact.

The parking demand for park facilities was determined by reviewing an EIR prepared for a major soccer complex in the City of Lodi and by interviewing local recreational organizations. Based on these sources the traffic study concluded that the overall parking supply is adequate to accommodate peak demand at project build-out. Peak seasonal demand for soccer and baseball during the months of August and September, could result in a peak hour shortfall of due to delayed turn over of parking spaces. To accommodate any overflow during these peak events, that overflow parking near the tennis courts would be utilized to provide an additional 30 parking spaces. If required parking could be provided on the open space north of the landfill. The overflow parking areas would be used to ensure that sufficient parking is provided on site to keep patrons of the park facilities from parking on the spine road or on Browns Valley Parkway.

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Mitigation - Any assembly use in the Homefield Building or other special event attracting large numbers of people to the park shall require the approval of the Community Services Director. Such activities shall be allowed only when it can shown that sufficient on- or off-site parking is available.

An overflow parking plan will be created and followed when park facilities will be used for soccer tournaments and/or during peak usage of the park for soccer and baseball activities.

The development of the park will have no significant effect on the safe operation of the adjacent Nut Tree Airport. The application will be acted on by the Solano County Airport Land Use Commission. The Commission will ensure that the plan is in compliance with the Airport Compatibility District and poses no threat to the safe operation of the airport. In addition, the Federal Aviation Administration will review the placement of field lights and the Homefield Building to determine if these park features will present any hazard to users of the airport.

Mitigation - An avigation easement, in a form acceptable to the Community Development Director, shall be dedicated prior to the issuance of any building permits. The easement shall provide for the right of aircraft overflight and related noises, and for the regulation of light emissions, electrical emissions, or the release of substances such as steam or smoke which could interfere with aircraft operations. The easement shall be in accordance with the Nut Tree Airport Compatibility District.

Potential hazards to motorists, bicyclists, or pedestrians is mitigated by the planned traffic signals at Brown Street and Browns Valley Parkway and Browns Valley Parkway and Allison Drive and the installation of sidewalk/bicycle paths along the extension of Allison Drive. Currently no sidewalk is provided south of the north entrance to the park. The installation of a sidewalk along the park frontage will be provided as mitigation to ensure that pedestrians have a dedicated path across the park frontage. The design of the improvements will comply with all applicable City street and sidewalk design standards. No sidewalks are planned along the roads within the park, however there is adequate open space along the roads to provided a protected pedestrian area.

Mitigation - Install sidewalk/bike path along park frontage on Browns Valley Parkway.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VII. BIOLOGICAL RESOURCES Would the proposal result in impacts to:				
a) Endanger, threatened or rare species or their habitats? including: Valley elderberry longhorn beetle, Western burrowing owl, Swainson's hawk	☐	☐	☒	☐
b) Locally designated species?	☐	☒	☐	☐
c) Locally designated natural communities?	☐	☒	☐	☐
d) Wetland habitat or vernal pools?	☐	☒	☐	☐
e) Wildlife dispersal or migration corridors?	☐	☒	☐	☐

A biotic study was conducted for the site in 1992 by Sugnet & Associates. (see Attachment C) The study stated that the project site represents foraging habitat for Swainson's hawk. The closest confirmed active nest is located at Nut Tree Airport. Development of the park will result in the removal of foraging habitat for the hawks.

A more comprehensive study of Swainson's hawk habitat was prepared by LSA Associates in 1994, in conjunction with the Environmental Impact Report for the North Village Project (see Attachment D) . Based on

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the findings of that report, the impact of developing approximately 110 additional acres of park is not considered a significant impact. The LSA report found that there would be ample foraging habitat for Swainson's hawk within a 10-mile radius that is not subject to reasonably foreseeable loss.

It is also the City's understanding that this loss of foraging habitat is not considered a "take" of a species as defined in the California Endangered Species Act. This understanding is based on correspondence received by the City from the law firm of Washurn, Briscoe & McCarty, dated August 22, 1994 (see Attachment E).

Although the City may not be legally required to mitigate for the loss of Swainson's hawk habitat, there are actions taken by the City that, in fact, serve to mitigate for the loss of habitat.

The City Council adopted a "Greenbelt Preservation" fee in 1993. This development impact fee is, by ordinance collected with the issuance of a building permit for each new single family or multi-family dwelling. The amount of the fee is $146 per single family dwelling and $101 per multifamily dwelling.

The City purchased a conservation easement covering approximately 1000 acres located between the cities of Vacaville and Dixon in 1996. This easement is part of a plan to ensure a permanent greenbelt of agricultural land along I-80, between the two cities.

The City entered into a "Master Water Agreement" with Solano Irrigation District in 1995. The agreement provides additional water to the City for municipal purposes and provides protection to the District from the urbanization of agricultural lands. As part of that agreement, the City has agreed not to "annex land or approve urban development or serve water to lands" outside of specified boundaries. The term of this agreement is to the year 2050. The effect of the agreement is to preserve agricultural lands, which are also hawk habitat for the foreseeable future.

Mitigation -None required

Section 404 of the Clean Water Act regulates the discharge of fill materials into water of the United States, including wetlands. In order to be considered a jurisdictional wetland based on US Army Corps of Engineers standards, three criteria must be met: 1. Water hydrology, 2. Hydric Soils, and 3. Hydrophytic vegetation. A wetland survey conducted by Jones & Stokes Associates in 1996 found approximately 10 acres of land, mostly in the area of the abandoned sewer settling ponds located in the southeast corner of the site and along the creek banks, meet this criteria. Any loss of wetland habitat is potentially significant in accordance with the federal standard of "no net loss" for the nation's remaining wetlands. Based on The Corps of Engineers verification of wetlands on site, the first phase of construction for the project, with clear spanning of Pine Tree Creek, can be completed without obtaining any permits from the Corps. The City of Vacaville will apply to the Corps of Engineers to obtain a permit to allow the removal of some wetlands on site prior to the construction of Phase II of the Master Plan. The Corps has indicated on a preliminary basis that it will require mitigation in the form of replacement wetlands at a ratio of 1.5:1 or 2:1 for acres lost. The replacement wetlands may be on site or adjacent to the site, off site through the purchase of property at a wetland bank, or the purchase of wetlands off site which will be protected through fee title acquisition or a conservation easement. A stream crossing permit from the Corps may be required for the roadway crossing of Pine Tree Creek. By crossing the creek with a clear span structure, no permit will be required; however, if a culvert is to be constructed a permit will be needed. A culvert stream crossing will require mitigation per the Corps determination.

Mitigation - Prior to grading or any construction of Phase II of the Master Plan, the City will obtain a individual permit from the Corps of Engineers. The individual permit will include all appropriate mitigation required by the Corps and USFWS in the form of wetland restoration, enhancement, or creation.

Jones & Stokes Associates conducted a habitat assessment for vernal pool fairy shrimp (Branchinecta lynchi), vernal pool tadpole shrimp (Lepidurus packardi), and Conservancy fairy shrimp (Branchinecta conservatio) for the site in August 1996. Several seasonal wetland on site were determined to be potential fairy shrimp habitat. The United States Fish and Wildlife Service is expected to make a determination that the wetland area is vernal pool fairy shrimp habitat. However, during a field visit during January 1997, Jones & Stokes found no fairy

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shrimp within the wetland areas. Testing per the requirements of US Fish and Wildlife could be conducted to determine the presence of fairy shrimp on site. If testing is conducted and no shrimp are found, no mitigation for loss of shrimp habitat would be required. If the site is not tested, then the loss of what is determined to be fairy shrimp habitat will be mitigated through the Corps of Engineers permitting process for the removal of wetlands. Construction of Phase I of the Master Plan will not impact any vernal pools.

Mitigation - Appropriate mitigation will be provided in the form of creation or preservation of vernal pool shrimp habitat per the requirements of the US Fish and Wildlife Service.

A reconnaissance-level special status species survey was conducted on the site in May 1992, by Sugnet & Associates. The study found that the although the site could provide suitable habitat for many special status species, only the western pond turtle was found on site. The list of special status species has been revised since 1992, and the Federally listed species that may now inhabit the site include the giant garter snake and the California red-legged frog. No evidence of elderberry bushes has been documented for the site. A biological study to determine the presence of these or any other threatened or endangered species or plants may be conducted as part of a biological study needed to process the Individual Permit for the taking of wetlands through the Corps of Engineers.

Mitigation - Appropriate mitigation will be provided in the form of habitat restoration, enhancement, or creation at a ratio and site acceptable to the Corps of Engineers, California Department of Fish and Game and the US Fish and Wildlife Service.

Loss of wetlands from the site will remove rest areas with good food supplies for migrating birds. The loss will be mitigated through the provision of additional seasonal wetlands west of Browns Valley Parkway and enhancement of the wetland area north of the intersection of Pine Tree Creek and the Putah South Canal.

Mitigation - Appropriate mitigation will be provided in the form of wetland restoration, enhancement, or creation at a ratio and site acceptable to the Corps of Engineers.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. ENERGY AND MINERAL RESOURCES. Would the proposal:				
a) Conflict with adopted energy conservation plans?	☐	☐	☐	☒
b) Use nonrenewable resources in a wasteful and inefficient manner?	☐	☐	☒	☐

The project will result in an increase in the use of energy to construct and operate the proposed development. The increase in energy usage is expected to be minor and are considered normal amount of energy for active recreational use area and would not result in a significant increase in energy consumption.

IX. HAZARDS. Would the proposal involve:				
a) A risk of accidental explosion or release of hazardous substances?	☐	☐	☐	☒
b) Possible interference with an emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
c) The creation of any health hazard or potential health hazard?	☐	☒	☐	☐

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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
d) Exposure of people to existing sources of potential health hazards?	☐	☒	☐	☐
e) Increase fire hazard in areas with flammable brush, grass or trees?	☐	☐	☐	☒

The proposed project will not include any components that could cause an accidental explosion or release of hazardous substances. The proposed project will not block any access routes or otherwise interfere with any emergency response plan or emergency evacuation plan. Development of the park will decrease the chance of fire hazard by eliminating uncontrolled growth of flammable brush and grasses and replacing it with irrigated, maintained playing fields.

The site is separated from the Nut Tree Airport by the Putah South Canal. The Master Plan for the park includes areas that are within the A, C and E safety zones. These zones restrict the space beneath them to particular types of land use and specific development densities. A portion of the extension of Allison Parkway into the park is within the A Zone, Clear Zone or Primary Surface Zone. The A Zone is an area of high risk and high noise where very low density land uses may be acceptable. Chapter 17.64 of the Zoning Ordinance states that acceptable uses within the A Zone include parks with low intensity uses. The extension of the roadway through this County owned property has been approved by the County. The southeast corner of the site is within the Outer Approach/Departure Zone (Zone C). Zone C is an area of substantial noise and moderate risk associated with routine overflight. The maximum non-residential density for this zone is 75 persons per acre. The facilities shown on the Master Plan that fall within this area are a portion of the soccer field south of the Homefield Building and the southeast half of the soccer field directly east of the Homefield Building as well several parking spaces and the access road into the park. These uses are all acceptable within the C Zone.

The remainder of the Centennial Park falls within the Adjacent to Runway or Final Approach Zone (Zone E). Zone E is an area of minor to significant noise with limited risk. There is no maximum density and most nonresidential uses are acceptable uses. Due to the change in General Plan designation for the lands within Centennial Park, the Solano County Airport Land Use Commission will be reviewing the Master Plan. The Nut Tree Airport Compatibility Plan places greater restrictions on the number of people within a building rather than outdoor areas due to the fact that evacuating a building is more difficult that evacuating an open space area if an airplane accident is involved. Because the uses within the park are outside, with the exception of the Homefield Building, these uses are consistent with the Nut Tree Airport Land Use Compatibility Plan. The Homefield Building will have a limited occupancy level of 1500 people.

Mitigation - To reduce the scope of hazard of interference with the operation of Nut Tree Airport, obtain approval of Notice of Construction from the Federal Aviation Administration for construction of light poles and the Homefield Building.

The proximity of industrial land, to the north and east, to the park presents a less than significant impact to the park and its users. The industrial land east of the Putah South Canal prohibits uses such as saw mills, petroleum refineries, cement manufacturing or other uses constituting a public or private nuisance because of emissions. The property immediately to the north requires a Conditional Use Permit (CUP) for businesses which use or store quantities of hazardous materials on site. Through the CUP process the City will be able to regulate the location and manner in which hazardous materials are stored. By overseeing the types of business which utilize the industrial park and their location, the creation of any public health hazard can be reduced to a level of less than significant. The portion of the park abutting the industrial land is designated for passive, outdoor uses, that may include a golf course. These are low intensity park uses that do not involve significant concentrations of people. This situation tends to lessen any possible safety issues.

Mitigation - Through consideration of subsequent development applications, the City will ensure that uses in the industrial park will not present a public health hazard to park uses.

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Through consideration of subsequent conditional use permit applications for the northerly portion of the park, the City will ensure that park uses are of a passive nature. Concurrent with development of the north portion of the park, fencing will be installed to separate the park from the industrial property to the north.

The proposed alignment of Allison Parkway is along the east property line of the park and parallels the Putah South Canal. The alignment of the parkway is designed to eliminate truck traffic needing access to the properties within the industrial park from using Browns Valley Parkway and therefore conflicting with residential traffic. Although construction of the road is not planned to occur during the phased construction of the park, if the parkway is extended through the park the conflict between park traffic and truck traffic could occur. Vehicular trips traveling to/from the industrial park would be approximately 50 feet from the soccer fields along the east property line. When Allison Parkway is extended through the site, the plans will be required to provide a visual and access barrier between the road and the park.

Mitigation - To limit the conflict between park traffic and industrial park traffic the roadway alignment shown on the Centennial Park Master Plan will be reconfigured to provide a 90 degree intersection to eliminate awkward movements and provide clear sight lines.

When Allison Parkway is extended throughout the site a fence or wall will be provided along its westerly right-of-way.

Solano County Environmental Management monitors the landfill on a yearly basis. Based on these visits, the County has stated that some garbage from the landfill has become exposed and may pose a hazard to users of the park, especially users of the proposed trail. Although the amount of waste which is visible on the site is limited, the hazard could be mitigated to a level of less than significant by adding cleaning the site and adding soil to the top of the landfill or by capping the landfill.

Mitigation - Prior to constructing a trail on the landfill, debris shall be removed from the top of the landfill and soil shall be added to the top of the landfill to keep debris from surfacing. The new surface will then be planted in accordance with state landfill recommendations and the proposed passive recreation use.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. NOISE. Would the proposal result in:				
a) Increases in existing noise levels?	☐	☒	☐	☐
b) Exposure of people to severe noise levels?	☐	☐	☒	☐

The project site and surrounding area is within an area exposed to a noise level of 70 DNL (day/night average noise level in decibels). The primary sources of noise are generated by Nut Tree Airport and Interstate 80 (General Plan Noise Element). Although some noise generated by the site will be from traffic on Browns Valley Parkway, the majority of the vehicles traveling to and from the site will be coming from the south and will have a less than significant impact on residents in the adjacent neighborhoods. Vehicle noise from trips traveling south on Browns Valley Parkway will be buffered by the existing landscaping in place along the road as well as the existing masonry wall.

Interior noise levels would be controlled by federal and state employee health and safety regulations (OHSA and Cal/OSHA). Construction activities would cause temporary noise impacts which may affect residents in the vicinity. The performance standards of the Land Use and Development Code, section 14.093.090, regulate the hours of construction which minimize this impact to a level of less than significant.

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Noise from activities within the park will be buffered by the separation between the fields and the residential lots. The volleyball court, the closest activity to the residential property, is 600 feet from the property line. The master plan has located the fields as far from the property line as is reasonable to provide a sound buffer. The fields that are expected to generate the most activity are the soccer fields along the eastern property line because these fields will be lighted until 10 p.m. Natural features on the site will also help to mitigate any noise coming from the soccer fields. The elevation of the inactive land fill, will help to defuse the noise generated by park activities.

The Performance Standards in the Land Use and Development Code state that public parks are exempt from the standards for non-transportation sources of noise if the facilities within the park are located within the park to reasonably limit the noise impact on other lands. By locating all the fields away from the sensitive noise receptors the master plan clearly meets the requirement of the Development Code. The noise generated by uses on the park site is not expected to have any impact on the Nut Tree Airport.

Mitigation - Hours of construction will be limited to those specified in the Land Use and Development Code in order to reduce impact on adjacent property owners.

The hours of outdoor activities will be limited to no later than 10 p.m. and night games or matches will only take place on fields a minimum of 1000 feet from the residential property.

The hours of operation for the Homefield Building will be from 6 a.m. to midnight seven days a week. To limit vehicular noise impact on the residential property, users of the Homefield Building will be required to use the south entry/exit to Browns Valley Parkway after sunset.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. PUBLIC SERVICES. Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:				
a) Fire Protection?	☐	☐	☒	☐
b) Police Protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Maintenance of public facilities, including roads?	☐	☐	☒	☐
e) Other government services?	☐	☐	☒	☐
f) Parks or recreation facilities?	☐	☐	☒	☐

Virtually any development will result in an increase in the amount of government services that is needed. The most obvious increase will be in the amount of services required of the Community Services Department to administer recreational programs and maintain the park. The indoor facility will be privately operated for a period of 15 years with two additional five year renewal periods. Fees for maintenance will be taken from the lease payment from the Homefield Building to maintain the park, roadway and infrastructure. The impact of the park on other governmental services is expected to be less than significant.

Fire Protection Fire protection will be provided by the Vacaville Fire Department. The existing Fire Station #3 is located on Eubanks Court approximately two miles from the park. In addition, all new buildings constructed on the site will be required to comply with the requirements of the Uniform Fire Code. No new fire stations would be required to serve the park.

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Police Protection Development of the project area will generate additional police calls. Although there are no parks in the City which are the size and have the facilities proposed for Centennial Park, in 1995 (the latest year for which information is available) there were 400 incidents in parks which resulted in 74 crime reports. The majority of these reports involved vandalism. The hours of operation of the indoor facility will limit the ability of the City to restrict access to the park during non-daylight hours. However, the northern entrance to the park will be closed at dusk to limit access to the park. In addition, active use of the Homefield building and the fields will reduce the opportunity for vandalism to occur in the park. The development of the park is not expected to have a significant impact on police services.

Schools The development of the park is expected to have no adverse impact on local schools.

Maintenance of Public Facilities Development of the park will increase the amount of maintenance which is needed for the park area. The building will be maintained by the private owner/operator while the property is under a lease contract. After the expiration of the lease the maintenance of the building could be the responsibility of the City, or the City may decide to lease the facility to another party. All park improvements, including the spine road, parking lots trails, landscaping and athletic fields will be maintained by the Community Services Department. Although the park will increase costs, it will also generate additional revenue for Community Services from fees for soccer and other on site facilities and rent from the Homefield Building. The City will receive $150,000 per year for the land lease from the Developer. This money will be used to help maintain the park. Additional revenue will reduce the financial impact of maintenance to a level of less than significant.

Mitigation: The lease payment for the Homefield Building will be used to maintain the park and its facilities. The north driveway into the park will be closed each night at sunset and the south entrance will be closed each night after closure of the Homefield Building.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. UTILITIES AND SERVICE SYSTEMS. Would the proposal result in a need for new systems or supplies, or substantial alterations the following utilities?				
a) Power or natural gas?	☐	☐	☒	☐
b) Communications systems?	☐	☐	☒	☐
c) Local or regional water treatment or distribution facilities?	☐	☐	☒	☐
d) Sewer or septic tanks?	☐	☐	☒	☐
e) Storm water drainage?	☐	☐	☒	☐
f) Solid waste disposal?	☐	☐	☒	☐
g) Local or regional water supplies?	☐	☐	☒	☐

Power or Natural Gas and Communication Systems Office and commercial space generally use energy as follows, as expressed in terms of per square foot of floor area annually: 15.0 Kilowatt hours (kWh) of electricity and .0.41 therms of natural gas. Using the estimated four thousand square feet of floor area shown on the floor plans for Homefield for office, retail and kitchen facilities, and 1000 square feet for the Vacaville Youth Soccer League building, the office/retail portion of the project would use 78,000 kWh of electricity and 2,132 therms of natural gas. The active recreation portion of the Homefield building will use approximately 1 kWh per square foot of floor area annually. The total electric use for this area would be 68,000 kWh per year. Finally, the outdoor lighting for the fields would use 64 kWh per field per hour. With an estimated use of 1000 hours of use

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per year per field the consumption of electricity would be 320,000 kWh. Total electric usage for the facility would be 466,000 kWh per year. Any modification to existing utilities or construction of new utilities to serve the proposed development would be determined by the providing utility company, which is currently Pacific Gas and Electric (PG&E). Connection to communication facilities, such as cable television, telephone or the facilities shall be provided as needed by with the development of the buildings and in accordance with the utility company requirements.

Mitigation - transmit development applications to PG&E, PacTel and other appropriate utility companies for their review. Modifications to existing utilities or construction of new utilities shall be installed in accordance with the utility company requirements.

Water and Water Treatment The existing municipal water system in the vicinity consists of an 8" water line already serving the site. A new 12" water line will be constructed along the service road to loop the existing dead end water line on site. With the looping of the water line, the existing water system has adequate capacity to handle the increased water demand from the proposed development, as based on an analysis using the City's computer water model. The area is served by the City's Zone 1 water system that sets the maximum elevation of any water fixture in a building at no higher than 220 feet above sea level. Given the proposed finish floor elevation of the Homefield building, of approximately 130 feet, there will be no restriction on water service to the building or site due to elevation.

Mitigation - All water system improvement and connections shall be installed in accordance with the City's Standard Specifications. No building or occupancy permit shall be issued except in accordance with the City's Water Master Plan and fire flow requirement of the Uniform Fire Code.

Sewer The existing restroom facilities are serviced by a 6" Sanitary Sewer line which connects to the 18" sanitary sewer line which parallels the south bank of the Pine Tree Creek. In addition, an existing 15" sanitary sewer line runs north/south through the eastern portion of the site. Based on the City Sewer and water Master Plans, the existing facilities will be adequate to service the site as shown on the master plan. The impact on the City sewer system is expected to be less than significant.

Storm Water Drainage The existing site topography causes water to drain across the site from the northwest to the east and southeast as a part of the Pine Tree Creek and South Horse Creek watersheds. The division line between the two watersheds runs through the center of the park east to west. The south fork of Horse Creek and Pine Tree Creek each traverse the park. Where the creeks meet the Putah South Canal storm water drainage detention areas have formed because the culverts under the canal can not adequately handle the storm water runoff from a 100 year storm. A Storm Drain Master Plan prepared for the City by West Yost and Associates estimates that approximately 92 acre feet of water is stored where Pine Tree Creek meets the Canal and 13 acre feet where the south fork of Horse Creek meets the Canal. The City of Vacaville Public Works Department is proposing to create a more formal network of detention basins on the park site to allow the use of the park property while still providing detention areas for storm water. The model for the Storm Drain Master Plan will provide 40 acre feet of storage off the south fork of Horse Creek and 42 acre feet of storage off of Pine Tree Creek. An additional detention basin off of Pine Tree Creek west of Browns Valley Road will provide additional storm drainage capacity. The storage capacity of these basins is an estimate and may change once final drainage calculations are completed.

Mitigation - If the Drainage Master Plan for the park establishes a need for stormwater detention basins, the timing of installation and size of the basins will be per the recommendations of the Plan. The athletic fields may serve a dual purpose as fields and detention basins.

Solid Waste Development of the project would increase the amount of solid waste generated within the City of Vacaville. Given the type of use, the additional volume is not expected to significantly affect the anticipated useful life of the existing landfill.

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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. AESTHETICS. Would the proposal:				
a) Affect a scenic vista?	☐	☐	☐	☒
b) Have a demonstrable negative aesthetic effect?	☐	☐	☒	☐
c) Create light or glare?	☐	☒	☐	☐

The park site is composed of land that contains an abandoned landfill and abandoned sewage treatment ponds. The development of the park will have no impact on a scenic vista.

The elevation of the site increases from east (el. 116')to west (abandoned landfill el. 137') which results in most of the residential property to the west of the park being elevated above the park. The finish floor elevations of the homes that border the southern portion of the park range from 135 feet to 141 feet.

The existing baseball fields, although not currently illuminated, were approved to be lighted with approval of a Conditional Use Permit by the Planning Commission in November, 1991. The current proposal is to also illuminate the three soccer fields that parallel the Putah South Canal and the two fields south of the Homefield Building. Each field will contain four, 60' light standards with 10 fixtures each. The closest illuminated field is 1380 feet from a residential lot, just over 1/4 of a mile. The maximum light level at the field will be 25 foot-candles. The new fields are farther from the existing residential area than the previously approved illuminated ball fields. The hours of operation of the illuminated fields will be from 5 p.m. (varies seasonable) to 10 p.m. The elevated topography of the abandoned land fill as well as the trees along the parks western property line will help to buffer the residential property from the lights on the playing fields. In addition, the houses have a higher finish floor elevation which will help to keep field lights from shining into the houses. Parking lots and structures on site will have security lighting. Given the distance which separates the residential property and the illuminated fields, with the mitigation measures proposed the impact of light and glare on adjacent uses can be reduced to a less than significant level.

Mitigation - Hood light fixtures to ensure downward projection of light and obtain FAA approval for the location and size or field lighting.

Field lighting will be shut off each night no later than 10 p.m.

XIV. CULTURAL RESOURCES. Would the proposal:				
a) Disturb paleontological resources?	☐	☐	☒	☐
b) Disturb archaeological resources including burial sites along creeks?	☐	☐	☒	☐
c) Have the potential to cause a physical change which would affect unique ethnic cultural values?	☐	☐	☒	☐
d) Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☒	☐

An archeological records search was conducted for the proposed project site by Sonoma State University. The records search indicates that there are no recorded prehistoric or historic resources on the project site. In addition, a field reconnaissance was also conducted using 10 to 35 meter transects. No cultural materials were found at the site, within the County owned property over which Allison Drive will extend or across Browns Valley

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Parkway where the future wetland detention area may be located. Given the result of the record search and the field reconnaissance it is unlikely that cultural resources will be found on site. If previously undiscovered cultural resources exist on the project site, and they are determined to be significant, any disturbance may be considered a significant impact. The impact, can however be mitigated to a level that is less than significant.

Mitigation - Should ground disturbing activities reveal the presence of cultural resources, work within 50 feet of the find shall cease immediately until a qualified archaeologist can be consulted to evaluate the remains and implement appropriate mitigation procedures. Should human skeletal remains be encountered, State law requires immediate notification of the County Coroner. Should the County Coroner determine that such remains are in an archaeological context, the Native American Heritage Commission in Sacramento shall be notified immediately to arrange for Native American participation in determining the disposition of such remains.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. RECREATION. Would the proposal:				
a) Increase the demand for neighborhood or regional parks or other recreational facilities?	☐	☐	☐	☒
b) Affect existing recreational opportunities?	☐	☐	☐	☒

Expansion of the existing park will increase the availability of recreational facilities to the community and have no adverse impact on existing or proposed recreational facilities.

XVI. MANDATORY FINDING OF SIGNIFICANCE.

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

☐	☒	☐	☐

b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?

☐	☐	☒	☐

c) Does the project have impacts that are individually limited, but cumulatively considerable?

☐	☐	☒	☐

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

☐	☐	☒	☐

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No.	Impact and Mitigation Measures	Timing	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance
1a	**Land Use and Zoning designation do not allow park development on entire site.** Amend Park and Recreation Master Plan to reflect change in designation	Amend Parks Master Plan by 12/31/97	Community Services Director	Community Development Director	NA
3b	**Expansive soils underlying the project site could expose people to risk of structural failure due to foundation and slab damage.** At the time of application for a building permit, an applicant shall submit a detailed soils report prepared by a geotechnical engineer, for the review and approval by the Building Official. The report shall be prepared in compliance with the Uniform Building Code, as may be amended by the City, and will define each building's proper foundation system, bearing capacity limits, settlement expectations, and building subgrade recommendations. Review soils report by geotechnical engineer	Prior to issuance of building permit	Homefield Developer	Community Development Director	City approval of geotechnical report
3d	**Erosion, changes in topography from excavation, grading or fill.** As a condition of approval of a grading permit, the City shall require that the grading operations include methods to reduce the amount of soil erosion. These methods, as determined by the City Engineer, shall include but are not limited to the following: watering site during grading for dust control, covering stockpiles of dirt with tarps, and re-vegetating any graded areas not proposed for immediate development. The City shall prepare a rough, master grading plan for the site prior to the approval of the initial grading permit. The City Engineer shall review grading permits to ensure that the building pad elevation would allow the finished floor elevation of any building to be above the elevation of the 100-year flood plain, as currently shown on the FEMA flood plain map or as may be subsequently amended by FEMA through approval of a letter of map amendment. .	Prior to issuance of grading permit.	Homefield Developer and City Engineer	Community Development Director	City approval of grading permit.
4a	**Change in drainage pattern and amount of surface run off.** If required by Drainage Master Plan create detention basins to effectively handle existing and added storm water run off.	Prior to issuance of grading permit for Phase II.	Director of Public Works and CIP engineers	Director of Public Works and Community Development Director	City approval of grading permit.

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No.	Impact and Mitigation Measures	Timing	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance
4b	**Exposure of people or property to water related hazards such as flooding** The City Engineer shall review building permit applications to ensure that the finished floor elevation of any building will be above the elevation of the 100 year flood plain, as required by the City's Flood Plain Ordinance. This elevation shall be as currently shown on the FEMA flood plain map or as may be subsequently amended by FEMA through approval of a letter of map amendment submitted by the City	Prior to issuance of building permit	City Engineer	City Engineer	City approval of building permit.
4c &h	**Discharge into surface waters and impact to ground water quality.** Conduct a SWAT test to determine effect of rain on abandoned landfill on ground water. Cap landfill if required due to ground water quality.	Prior to installing walking path on land fill.	Director of Public Works	Director of Public Works	Review and approval of SWAT report by Water Resources Board.
5a	**Violate any air quality standard or contribute to an existing air quality violation.** Obtain required permits from Yolo-Solano Air Quality Management District and implement any mitigation required by the District.	Prior to issuance of grading or building permit.	Homefield Developer	Director of Community Development	Approval of required permits by Yolo Solano Air Resources Board.
6a	**Insufficient Parking capacity on site or off site.** Any assembly use in the Homefield Building or other special event attracting large numbers of people to the park shall require the approval of the Community Services Director. Such activities shall be allowed only when it can shown that sufficient on- or off-site parking is available.	Prior to any special event, the Director of Community Services will ensure that no competing uses will be taking place on site simultaneously.	Community Service Director	Community Services Director and Community Development Director	Written documentation of approval of special event on site.
6e	**Hazards or barriers for pedestrians or bicyclist.** Provide sidewalk along park frontage on Browns Valley Parkway.	Concurrent with permits for installation of spine road.	Director of Public Works	Director of Public Works	Completion of sidewalk.
	Air Traffic Impacts. An avigation easement, in a form acceptable to the Community development Director, shall be dedicated prior to the issuance of any building permits. The easement shall provide for the right of aircraft overflight and related noises, and for the regulation of light emissions, electrical emissions, or the release of substances such as steam or smoke which could interfere with aircraft operations. The easement shall be in accordance with the Nut Tree Airport Compatibility District.	Prior to issuance of a Building Permit.	Community Development Director	Community Development Director	Provide copy of recorded easement to the Community Development Department.
	To reduce scope of hazard of interference with the operation of nut Tree Airport, obtain approval of Notice of Construction from the Federal Aviation Administration for construction of light poles and the Homefield Building.	Prior to issuance of a Building Permit.	Community Development Director	Community Development Director	Approval by FAA of Notice of Construction.

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No.	Impact and Mitigation Measures	Timing	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance
7d	**Project would result in the loss of up to 8 acres of wetland habitat.** The City of Vacaville will obtain an Individual Permit from the Corps of Engineers and shall comply with any and all conditions.	Prior to issuance of grading permit.	Director of Community Development	Director of Community Development	Acquire Permit or Written Verification of No Further Action
7d	**Project would impact vernal pools.** The City shall have a qualified biologist conduct a species specific survey for vernal pool fairy shrimp, vernal pool tadpole shrimp and Conservancy fairy shrimp. The survey will be conducted in accordance with the most current guidelines or protocols to determine the time of year and survey methodology.	Prior to issuance of grading permit.	Director of Community Development	Director of Community Development	Approval of Biological Surveys.
	The City shall develop a mitigation and monitoring program for impacts to wetlands and vernal pools which shall be approved by DFG and USFWS.	Prior to issuance of grading permit.	Director of Community Development	Director of Community Development	Submittal and Approval/Implementation of Mitigation Plan
7e	**Project would alter existing wetlands utilized by migrating birds.** Per the requirements of the Corps of Engineers and USFWS, wetland mitigation will be provided in the form of wetland restoration, enhancement or creation on the park site, or adjacent to the park to provide suitable habitat for migrating birds.	Prior to issuance of grading permit.	Director of Community Development	Director of Community Development	Submittal and Approval/Implementation of Mitigation
9c	**The location of the project adjacent to an airport, industrial park and arterial right of way may create the potential for human health hazard.** File a Notice of Construction with the FAA for the Homefield Building and light structures for soccer fields.	Prior to issuance of building permit	Director of Community Development	Director of Community Development	Written Approval from FAA
	File an application for approval with the Airport Land Use Commission.	Prior to Planning Commission Action on approval of Master Plan	Director of Community Development	Director of Community Development	Approval from Solano County Airport Land Use Commission
	Through consideration of subsequent development application, the City will ensure that uses in the Industrial Park will not present a public health hazard to park users.	Ongoing basis as industrial land is developed	Director of Community Development	Director of Community Development	Approval of Development Review for adjacent properties.
	Provide sound wall or other buffer along westerly right-of-way of Allison Parkway when it is extended through the park. Realign park roadway to reduce interference between industrial park and park traffic and provide clear lines of sight by providing a 90 degree intersection between the park spine road and the Allison Parkway intersection.	At time of extension of Allison Parkway through the park.	Director or Public Works and Director of Community Development	Director of Community Development	Approval of Improvement Plans
	Remove debris which has surfaced in the abandoned land fill and provide additional soil on the top to keep additional material from surfacing.	Prior to installation of the walking trail.	Director or Public Works and Director of Community Development	Director of Community Development	Approval of Improvement Plans

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No.	Impact and Mitigation Measures	Timing	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance
10	**The project will increase noise levels over existing levels.** Limit hours of construction by providing contractors with information regarding acceptable work hours per the limitation specified in the Land Use and Development Code.	In conjunction with issuance of all permits for work within the park boundaries.	Director of Community Development	Director of Community Development	Conditions of approval provided to contractor including limits on hours of construction.
	Propose as a part of conditions of approval for the project, limit hours of activities within the park (Homefield Building 6 a.m. to midnight) and fields upon which night-time games may be played (10 p.m.)	In conjunction with Planning Commission approval of Master Plan	Director of Community Development	Director of Community Development	Conditions of approval.
	Limit vehicular noise on the residential property by closing the north entry/exit at sunset.	In conjunction with Planning Commission approval of Master Plan	Director of Community Development	Director of Community Development	Conditions of approval.
11 b	**Development of the park may increase the need for police services due to vandalism.** Close access to the north driveway at dusk and close access to the park at time of closing of facilities each evening.	Planning Commission Master Plan CUP Condition of Approval	Director of Community Development	Director of Community Development	Condition of approval.
11 d&f	**Development of the park will impact public services by requiring maintenance of new facilities and buildings.** Utilize Homefield lease payments to maintain park and its facilities.	Condition of approval by City Council for lease agreement.	Director of Community Services	Director of Community Services	Approval of lease agreement.
12 a& b	**The proposed project may result in the need for additional electric, natural gas and/or communications systems on site.** Transmit development application to PG&E, PacTel and other appropriate utilities for their review. Modification to the existing utilities will be installed per the providers specifications.	Concurrent with building permit review.	Director of Community Development	Director of Community Development	Approval of permit application by utilities.
12c &g	**The proposed project will result in the need for additional water service to the site.** All water system improvements and connections shall be installed in accordance with the City's Standard Specifications. No building permit or occupancy permit shall be issued except in accordance with the City's Water Master Plan and fire flow requirements of the Uniform Fire Code.	Concurrent with building permit review and prior to issuance of certificate of occupancy.	Director of Community Development, Building Official and Fire Marshal	Director of Community Development, Building Official and Fire Marshal	Verification during permitting and inspections during construction.
12 e	**The proposed project will effect existing storm water drainage capacities.** If the Drainage Master Plan for the park establishes a need for stormwater detention basins, the timing of installation and size of the basins will be per the recommendations of the Plan. The athletic fields may serve a dual purpose as fields and detention basins.	Installed at the time required by the Storm Drainage Master Plan.	Director of Public Works	Director of Public Works	Approval of drainage improvement plans.

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No.	Impact and Mitigation Measures	Timing	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance
13c	**Field lighting will create a light source on the site.** Hood light fixtures to ensure downward projection of light. Field lighting will be shut off each night no later than 10 p.m. Obtain FAA approval of field light standards.	Issuance of electrical permit or building permit for light standards.	Director of Community Development	Director of Community Development	Approval of photometric plan and conditions of approval.
14	**Development of the site may disturb archaeological resources.** Should ground disturbing activities reveal the presence of cultural resources, work within 50 feet of the find shall cease immediately until a qualified archaeologist can be consulted to evaluate the remains and implement appropriate mitigation procedures.	Concurrent with grading and site work.	Director of Community Development	Director of Community Development	On site verification during grading and site work.

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ATTACHMENT C

SUGNET & ASSOCIATES

ENVIRONMENTAL CONSULTANTS

2260 DOUGLAS BOULEVARD, SUITE 160 · TELEPHONE (916) 782-9100 · FACSIMILE (916) 782-9134
ROSEVILLE, CALIFORNIA 95661

May 19, 1992

Mr. David Hubbell
Planning Project Manager
City of Vacaville
650 Merchant Street
Vacaville, CA 95688

Re: *150 ± Acre Vacaville Park Property, Solano County*

Dear Mr. Hubbell:

At your request, a wetland assessment and reconnaissance-level special status species survey were conducted in May 1992 for the 150± acre Vacaville Park property, located in Solano County, California. Baseline data from the following sources were reviewed prior to field survey: 300 scale black and white aerial photography from 1989, 1:2400 USGS 7.5 minute Allendale and Elmira quadrangles; Soil Conservation Service maps for Solano County; and the California Department of Fish and Game's Natural Diversity Data Base (NDDB) printout for the above USGS Quadrangles (Appendix I). Subsequent to this review, a field reconnaissance of the property was conducted to ascertain the phenology of dominant plant species, assess predominant drainage patterns, evaluate soil morphology and drainage class, ground-truth aerial photos and determine the presence of special status species. Potential special status species that could occur on the project due to presence of suitable habitat coincident with known geographic ranges are listed in Table 1.

Biologists walked the entire site on May 12, 1992. Wetland and special status species data were collected for input onto a 1"=200' scale base map.

While the Vacaville Park site consists largely of highly disturbed annual grassland and a historical sewer treatment plant, approximately 6.63± acres of waters of the United States and wetlands, potentially subject to Army Corps Section 404 jurisdiction, were identified on-site during the May, 1992 assessment. An acreage summary is provided in Table 2. The locations of jurisdictional and potentially jurisdictional wetlands and waters are depicted on the 1"=200' scale, Vacaville Park Preliminary Biological Constraint and Wetland Assessment Map (enclosed).

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Table 1. Special Status Species in the Vacaville Park Project Vicinity[1]

Flora:	Legal Status (State /Federal/CNPS)	Habitat
Contra Costa goldfields (*Lasthenia conjugens*)	-/C1/1B	vernal pool/ seasonal wetland
Dwarf downingia (*Downingia humilis*)	-/C3c/1B	vernal pool/ seasonal wetland
Bearded allocarya (*Allocarya hystriculus*)	-/C2/1B	vernal pool/ seasonal wetland
Sanford's arrowhead (*Sagittaria sansfordii*)	-/C2/3	freshwater marsh
Adobe lily (*Fritillaria pluriflora*)	-/C2/1B	chaparral, cismontane woodland, valley/foothill grassland (adobe soils)
Fauna:		
Vernal pool fairy shrimp (*Branchinecta lynchi*)	-/C1Δ	vernal pool/ seasonal wetland
Conservancy fairy shrimp (*Branchinecta conservatio*)	-/C1Δ	vernal pool/ seasonal wetland
California linderiella (*Linderiella occidentalis*)	-/C1Δ	vernal pool/ seasonal wetland
Tadpole shrimp (*Lepidurus packardi*)	-/1RΔ	vernal pool/ seasonal wetland
Black-shouldered kite (*Elanus caeruleus*)	*/1	riparian/woodland (nest); savannah/grassland (forage)
Swainson's hawk (*Buteo swainsoni*)	ST	open grassland
Northern harrier (*Circus cyaneus*)	CSC/-	marsh/grassland
Burrowing owl (*Athene cunicularia*)	CSC/-	open grassland (rodent burrows)
Tricolored blackbird (*Agelaius tricolor*) (nesting colony)	-/C2	nesting: marsh/riparian scrub
Loggerhead shrike (*Lanius ludovicianis*)	-/C2	grassland/savannah
• Western pond turtle (*Clemmys marmorata*)	CSC/C2	streams/ponds

[1]Based on data obtained from the California Department of Fish and Game's Natural Diversity Data Base (NDDB) and lists from the California Native Plant Society (CNPS) and the U.S. Fish and Wildlife Service.

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C1 -Enough data on file to support federal listing.
C2 -Category 2 Candidate for Federal listing (Taxa for which existing information indicates may warrant listing, but for which substantial biological information to support a proposed rule is lacking).
C3C -Too widespread or not threatened at this time.
ST -State listed, threatened.
CSC -California Department Fish and Game "Species of Special Concern"
1B -Rare and endangered in California and elsewhere. (CNPS)
3 -Rare but not endangered (CNPS).

* Falls into one or more of the following categories:
- Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines.
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range.
- Population(s) in California that may be peripheral to the major portion of a taxon's range, but which are threatened with extirpation within California.
- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands , riparian, old growth forests, desert aquatic systems, native grasslands).

• Habitat and/or individual observed during survey.
Δ Currently proposed for Federally listed - endangered

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Table 2. Preliminary Estimate of Army Corps Jurisdictional Acreage

Classification	Acreage
Seasonal Wetland	0.61
Seasonal Marsh (potentially jurisdictional)	4.80
Intermittent Drainage	1.22
Total:	6.63

The predominant wetland features on site are the seasonal marsh areas associated with basins historically used for sewer treatment. These seasonal marsh mosaics occupy approximately 4.80 acres. These man-induced wetlands, dominated by ryegrass (*Lolium multiflorum*) may or may not be considered Army Corps jurisdictional. The Corps makes such determinations on a case by case basis. Other on-site wetland features include approximately 0.61 acres of seasonal wetland and 1.22 acres of intermittent drainages. Portions of the southern-most intermittent drainage are lined with riparian scrub habitat composed predominately of blackberry (*Rubus* sp.) and various willows (*Salix* sp.). This habitat type often falls under California Department of Fish and Game jurisdiction.

Besides jurisdictional waters and wetlands present on-site, other environmental constraints include the presence of special status species and habitat. Table 1 lists special status plant and wildlife species which could potentially occur on the Vacaville Park project site due to the presence of suitable habitat coincident with known geographic ranges. A discussion of potential special status species follows:

No special status plant species were encountered during the May 1992 survey. Contra Costa goldfields (*Lasthenia conjugens*), Bearded allocarya (*Allocarya hystriculus*), and Dwarf downingia (*Downingia humilis*), could potentially occur in the site's northern-most seasonal wetland, though none of these species were encountered during the survey.

Wetter portions of on-site intermittent drainages could potentially support Sanford's Arrowhead (*Sagittaria sansfordii*), a C2 Candidate for federal listing. Surveys for this species should be conducted during its flowering period in May and June. None were observed during the may 1992 survey though these results are inconclusive. A more thorough survey for this species is recommended.

Adobe lily (*Fritillaria pluriflora*), could potentially occur in the annual grassland on site due to the presence of clay soils. However, it is unlikely to occur due to the site's historic disturbance and predominance of introduced grasses and weeds.

The only special status wildlife species observed during the survey was western pond turtle (*Clemmys marmorata*). Two turtles were observed in the northern central intermittent drainage that traverses the site west to east. Western pond turtles are a California Department of Fish and Game (CDFG) species of special concern (CSC). These turtles most likely reside off site in the Putah South Canal during dryer months when water is no

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longer present in the intermittent drainage system. However, urban runoff may provide an ample water supply in the western portions of the drainage year round.

The northern most seasonal wetland could potentially support special status crustaceans such as fairy shrimp (*Branchinecta* sp.), California linderiella (*Linderiella occidentalis*) and the vernal pool tadpole shrimp (*Lepidurus packardi*). These previously federal C1. candidates have recently been petitioned for a federal endangered listing. This seasonal wetland should be sampled in between February and April to determine whether or not these crustaceans are present.

The entire Vacaville park site which is composed predominately of disturbed annual grassland, represents foraging habitat for various raptor species. Special status raptors which may utilize the site include burrowing owl (*Athene cunicularia*), black shouldered kite (*Elanus caeruleus*), Northern harrier (*Elanus caeruleus*) and Swainson's hawk (*Buteo swainsoni*).

Burrowing owls, a CDFG species of special concern, are subterranean nesters which utilize the burrows of mammals such as California ground squirrels. While suitable habitat occurs throughout much of the site, no burrowing owls were observed during the May 1992 survey. This species allows for surveys throughout the year and further surveys are recommended. Nest sites should be avoided if they are found to occur on site.

Black shouldered kites may also forage in the annual grassland on site. This species nests in trees adjacent to suitable foraging areas. Few nesting sites are available on site, i.e., one cottonwood tree in the southern portion of the site. No evidence of nesting was found during the May 1992 survey. The majority of trees on site are too small to serve as suitable nest sites.

Another special status raptor species that may occur onsite is the Northern harrier a CDFG species of special concern. It is associated with marsh and grassland habitats. Both suitable foraging and nesting habitat occurs throughout the site. Nesting occurs from April to mid May in grassland areas. While no harriers were observed during the preliminary survey, additional surveys for nesting harriers are recommended.

Although the NDDB does not list occurrence of Swainson's hawk for the Vacaville Park property this bird is known to forage in open grassland and agricultural habitats in the region and nests are known within the vicinity of the project site. Since the hawk may forage at least ten miles out from its nest, any suitable foraging cover including alfalfa, grassland, and most row crops within a 10 mile radius of a known nest is considered Swainson's hawk habitat. The Vacaville Park property is within 10 miles of known nests. While no hawks were observed during the survey; loss of suitable foraging habitat may require mitigation.

Current Department of Fish and game mitigation guidelines include no net loss of foraging and nesting habitat. Impacts are to be mitigated at a minimum of ratio of 1:1 through development of new optimal foraging habitat including alfalfa and row crops such as

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tomatoes, oats, wheat, barley, and sugar beets. Future mitigation ratios may be as high as 3:1.

Loggerhead shrike (*Lanius ludovicianis*), a C2 candidate for federal listing may also occur on site. This species is relatively widespread in grassland areas throughout the state. It was recently designated a federal C2 candidate species due to habitat decline. Nesting sites should be avoided if they are found to occur on site.

Suitable habitat for tricolored blackbird (*Agelaius tricolor*), was also identified during the May 1992 preliminary survey. Tricolored blackbird is a Category 2 Candidate for federal listing and has recently been petitioned for "state endangered listing". It's preferred nesting habitat is freshwater marsh but it may also nest in riparian areas among other nesting substrates. Foraging habitat includes wetlands and adjacent grasslands. Both suitable foraging and nesting habitats occur on-site particularly along the southern most intermittent drainage. No tricolored blackbirds were observed during the survey which was conducted well within their breeding season. Should they be discovered to nest on-site, impacts to nesting habitat may require mitigation. Mitigation may include habitat development and monitoring plans.

Of the fourteen other special status wildlife species considered potential for the site, only one was observed. Two western pond turtles, a CDFG species of special concern, were observed in the north-central intermittent drainage on site. No other special status wildlife species were observed during the May survey, though more detailed surveys are recommended.

Included herewith is a Preliminary Biological Constraint and Wetland Assessment map for the Vacaville Park property. It identifies Army Corps jurisdictional areas and potential Swainson's hawk foraging habitat. Please feel free to contact me should you have any questions or need additional information.

Sincerely,

Peter Balfour
Associate Biologist

Enclosure

PB/sd

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ATTACHMENT F

October 18, 1996

Ms. Wendy Thomas
Planning Department
City of Vacaville
650 Merchant Street
Vacaville, CA 95688

SUBJECT: Centennial Park Wetlands

Dear Ms. Thomas:

On August 27, 1996, a Jones & Stokes Associates wetland specialist and soil scientist conducted a survey of the Centennial Park project site in Vacaville, California. The purposes of the survey were to assess the jurisdictional status of the abandoned sewer ponds, evaluate the site for the presence of suitable habitat for federally listed threatened or endangered shrimp species, and to conduct a reconnaissance-level survey for wetlands at two sites for a proposed access road and detention basin. The methods employed for these studies and the results are detailed below. In addition, potential mitigation options for wetland impacts are described as well as wetland protection measures.

Methods

Jurisdictional Status of Sewer Ponds

The abandoned sewer ponds were assessed for their status as wetlands under the jurisdiction of the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. Wetlands are defined as "areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b], 40 CFR 230.3). To be considered under federal jurisdiction, a wetland must support positive indicators for hydrophytic vegetation, hydric soil, and wetland hydrology as defined in the U.S. Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987).

The routine onsite determination method, based on mandatory technical criteria and field indicators described in the 1987 Wetlands Delineation Manual (Environmental Laboratory 1987), were used as a basis for identifying wetlands. The wetland indicator status of plants was based on Reed (1988). Nonwetland areas potentially subject to federal jurisdiction were evaluated according to various regulatory guidance letters issued by the Corps.

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The project area was surveyed on foot on August 27, 1996, to evaluate the extent and types of wetlands present, and to determine appropriate locations for sample data points. Potential wetlands were initially identified by assessing whether hydrophytic vegetation was prevalent or would be expected to be prevalent under normal circumstances and normal conditions (as these terms are defined in Environmental Laboratory [1987]). Sites with a prevalence of hydrophytic vegetation were further evaluated for wetland hydrology and hydric soils.

Soil pits were excavated along transects from obvious wetlands to nonwetlands in the abandoned sewer ponds. At each soil pit, indicators of wetland hydrology and hydrophytic vegetation also were assessed. The edge of the wetland boundary was determined by the last point on the transect that possessed evidence of all three parameters. The proposed sites for an access road and detention basin on county and city property, respectively, were surveyed on foot and areas that may qualify as jurisdictional wetlands were mapped on 1 inch = ±240 feet black and white aerial photographs taken on March 31, 1994.

Habitat Assessment for Federally Listed Shrimp

The vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardi*), and Conservancy fairy shrimp (*Branchinecta conservatio*) are federally listed shrimp which are known to occur in the vicinity of the project area and could potentially be supported by seasonal wetlands on the project site.

The seasonal wetlands were assessed for their suitability as shrimp habitat by observing indicators of ponding duration and depth. Seasonal wetlands that pond water continuously for 14 days or longer at a water depth of greater than 1 inch can be considered suitable habitat for threatened or endangered shrimp that are known from the region (Helm 1996). Under conditions when water temperature, chemistry, and other habitat factors are ideal, some shrimp species may be able to complete their life cycle in fewer than 14 days; however, this is more atypical than typical. Seasonal wetlands that pond water at depths of less than 1 inch typically experience daily and seasonal water temperature fluctuations that are too extreme (e.g., freezing in winter and too warm in spring) to support shrimp (Helm 1996). Seasonal wetlands were visually inspected for evidence indicating depth of inundation, duration of inundation, and presence of exuviae (outer hardened shell of some shrimp species) to determine if they were potential shrimp habitat. Indicators of greater than 14 days of inundation include algal matting and vegetative composition. Indicators of ponding depth include watermarks on woody vegetation, waterlines on rocks or debris, and site micro topography.

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Results

Wetlands

The three mandatory technical criteria for wetlands (prevalence of hydrophytic vegetation, wetland hydrology, and hydric soils) were directly observed or inferred within the abandoned sewer ponds at the project site and were found to be functioning as wetlands under normal circumstances and conditions as defined by the Corps (Environmental Laboratory 1987). Vegetation in the ponds is a mixture of native and non-native hydrophytic vegetation. The wetland affinity of plants in the ponds varies from obligate wetland species (plants that almost always occur in wetlands in normal conditions) to facultative species (plants that occur in uplands as well as wetlands). The dominant plant species in the ponds were swamp timothy (*Crypsis schoenoides*) (obligate wetland species), Italian ryegrass (*Lolium multiflorum*)(facultative species), and lambsquarter (*Chenopodium album*) (facultative species). Soils in the ponds displayed low chroma matrix colors and bright mottles typical of hydric soils and were of a heavy clay texture. Additionally, the soil on which the abandoned sewer ponds are situated is identified as Clear Lake Clay and is listed as hydric on the local hydric soil list produced by the Natural Resource Conservation Service. Hydrologic inputs to the ponds appears to be entirely from rainfall and natural runoff and no evidence of significant artificial hydrologic inputs were found.

The abandoned sewer ponds are functioning as natural seasonal wetlands and their Corps jurisdictional extent is now greater than is indicated in the 1992 wetland delineation (Sugnet & Associates 1992). The increase in the extent of wetlands at the project site may be in response to the resumption of average rainfall in the Sacramento Valley. The delineation in 1992 was conducted after approximately 5 years of drought conditions. The below average rainfall may have precluded the establishment of wetland vegetation in some areas. Evidence for this hypothesis is that swamp timothy, an obligate wetland species, was not recorded during the 1992 delineation. Since that time, swamp timothy (an obligate wetland species) has replaced Italian ryegrass (a facultative species) as the overall dominant in the wetter portions of the ponds indicating that some of the site may now be too wet for Italian ryegrass following normal rain years.

No wetlands were found within the areas indicated for the access road on County property or the presumed location for the detention basin on City property. A small seasonal swale is found to the west of the proposed access road alignment. A seasonal wetland and channelized perennial drainage (Pinetree Creek) are in the vicinity of the area indicated as the potential site for a detention basin. These wetland features are indicated on Figures 1 and 2 for reference. These wetlands would need to be avoided during construction and protected following the measures identified under Wetland Protection below.

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Shrimp habitat

Several seasonal wetlands at the project site could serve as suitable habitat for federally listed shrimp species. The majority of suitable shrimp habitat (approximately 0.15 acre) is found scattered in the lowest lying areas of the abandoned sewer ponds (Figure 3). Although not pristine habitat, these areas nonetheless possess adequate depth and support ponding for a long enough duration for shrimp species to complete their life cycle. As identified in Sugnet & Associates (1992) the small seasonal wetland in the northern portion of the project site is also suitable habitat for shrimp species.

Because the site supports potential habitat for federally listed shrimp which are known to occur in the project vicinity, two options are available for federal Endangered Species Act (ESA) compliance. The first option is the project proponent can assume that all seasonal wetlands suitable for federally listed shrimp on the project site do support shrimp. Under the second option, the project proponent can hire a qualified biologist who possesses a valid Section 10(a)(1)(A) shrimp take permit to conduct surveys for the presence or presumed absence of shrimp.

If the project proponent assumes that the seasonal wetlands at the site support shrimp, then the project is subject to ESA compliance which includes formal consultation between the U.S. Fish and Wildlife Service (USFWS) and the Corps and compliance with mitigation requirements for listed shrimp. Presently, the Sacramento field office of the USFWS has a programmatic consultation on issuance of Section 404 permits for projects with small effects to vernal pools. However, for the programmatic consultation to be implemented, the project must have less than 1 acre of impacts to shrimp habitat. Impacts include both direct and indirect effects to the habitat under the programmatic consultation. Under this programmatic consultation, for every acre of habitat directly or indirectly affected, at least 2 acres must be dedicated in an offsite preserve. In addition, for every acre of habitat directly affected, at least 1 acre of habitat must be created offsite or at least 2 acres created onsite.

On the other hand, if the project proponent chooses to survey for shrimp, the USFWS gives two survey choices; wet-season sampling or dry-season sampling. Wet-season sampling must be conducted for 2 years within a 5-year period. Wet-season surveys are initiated when the pools fill and are conducted at 2 week intervals until the pools dry. Dry-season sampling entails the collection soil from the seasonal wetlands and subsequent analysis of the soil samples for shrimp cysts (eggs). Dry-season sampling can only be conducted in conjunction with wet sampling for 1 year.

Upon completion of 2 years of wet-season sampling or a combination of wet- and dry-season sampling and if no adult shrimp or their cysts are detected and the USFWS approves the surveys, the project is not subject to ESA requirements regarding listed shrimp. However, if federally listed shrimp are found at the project site, then the project is subject to ESA compliance through programmatic consultation, if appropriate, or through formal consultation with the USFWS and the Corps.

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Wetland Mitigation Options

According to the Memorandum of Agreement between the Corps and Environmental Protection Agency, the proper sequence of mitigation priority in project design is to:

- first, avoid adverse effects on wetlands;
- second, if avoiding adverse effects is not practicable, minimize effects on wetlands to the extent practicable; and
- third, compensate for those impacts on wetlands that are unavoidable.

In short, every effort to minimize impacts to wetlands on site should be pursued. Reducing the amount of jurisdictional wetland acreage impacted will reduce the amount of mitigation required. For those wetland areas that cannot be avoided, several options are available to compensate for their loss. These options are:

- create and maintain seasonal wetlands at a suitable location offsite;
- participate in a USFWS and Corps approved mitigation bank; or
- create suitable mitigation wetlands onsite.

Creation of wetlands offsite also requires that a suitable parcel of land (i.e., suitable soils, topography, and hydrology) is available for the mitigation project. The creation, maintenance, and monitoring of seasonal wetlands offsite can be costly and the success of the created habitats is not guaranteed. Participation in a mitigation bank is a another opportunity for mitigation, however, currently there is not a permitted bank within a 40-mile radius of the project site as required by California Department of Fish and Game (DFG) mitigation banking guidelines. Participation in a mitigation bank also requires that the sequencing approach to wetland mitigation as mentioned above is followed. Participation in a mitigation bank for impacts to wetlands at the Centennial Park site appears to be a feasible option. Roger Schoonover of DFG in Solano County indicated in a September 11, 1996 telephone conversation that participation in the Wildlands Inc. mitigation bank in Placer County would be possible even though it is outside the 40 mile maximum radius. Three other potential mitigation banks, two in Sacramento County and one in Solano County, are pending approval from state and federal agencies at this time. Following approval, these banks could be other viable options for offsite mitigation.

Based on the future plans for the Centennial Park site, the opportunities for onsite mitigation are minimal; however, if those plans were to evolve to include wetland mitigation, the soils on site could support seasonal wetlands.

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Impacts to federally listed shrimp species, if present, can also be accomplished through onsite mitigation, offsite mitigation, or the purchasing of credits in a USFWS-approved shrimp mitigation bank.

Currently, only one mitigation bank was able to give a quote on the cost of mitigation credits for wetlands. This mitigation bank for vernal pools operated by Wildlands Inc., is located in Rocklin, California and credits are $70,000 each. The exact number of credits that may be required for this project are subject to negotiation with the Corps and USFWS; however, the number of credits would likely not exceed two times the number of acres affected. If the location for offsite preservation has not been determined or is not currently available, the project proponent can enter into a three-way agreement with the USFWS and The Nature Conservency . Under this agreement, the proponent "banks" its money with The Nature Conservency and the USFWS for future investment into a suitable mitigation bank. The amount of money required for this is determined through negotiations with the USFWS.

Detailed design and construction of seasonal wetlands onsite or offsite costs approximately $20,000 to $30,000 per acre. Monitoring of the constructed wetlands on an annual basis can range from approximately $7,000 to $15,000 depending on the number of parameters to be monitored. Seasonal wetland monitoring is typically required for a period of 5 years.

Wetland Protection Measures

Wetlands should be protected from inadvertent construction related impacts. An option for protection involves erecting high visibility exclusion fencing around the wetland to be protected. Protection fencing that has been used on other projects with success is Visi Barrier, model number XL5210 (available through Dura Fence Company, Sacramento) fastened to metal T-posts. Fencing should be placed so that there is approximately a 25-foot buffer between the wetland boundary and construction activity. The exact location for the protection fencing should be staked or flagged in the field by a qualified wetland specialist and fence should be installed by a qualified contractor. Fencing should be removed following construction.

In addition to fencing, every effort should be made to prevent construction tailwater, sediment, or other artificial hydrologic or material inputs to the wetlands. This can be accomplished by erecting sediment control fencing or placing hay bales in swales or drainages feeding the wetlands.

Grading of the surrounding watershed of the abandoned ponds does not appear that it would affect the wetland's hydrologic regime. Field investigations did not reveal evidence that the wetlands' hydrology is significantly dependent on runoff from the surrounding watershed, instead it appears that the wetlands' hydrology is driven by direct rainfall. Because of the extremely high clay content of the soils in the abandoned ponds, it appears that once saturated by rainfall any

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additional rainfall would readily pond. Additionally, construction of the softball facilities immediately to the west do not appear to have affected the hydrology of the ponds. Therefore, assuming a buffer is established between grading activities and the wetland boundary during construction, it is unlikely that grading will have any effect on wetland hydrology.

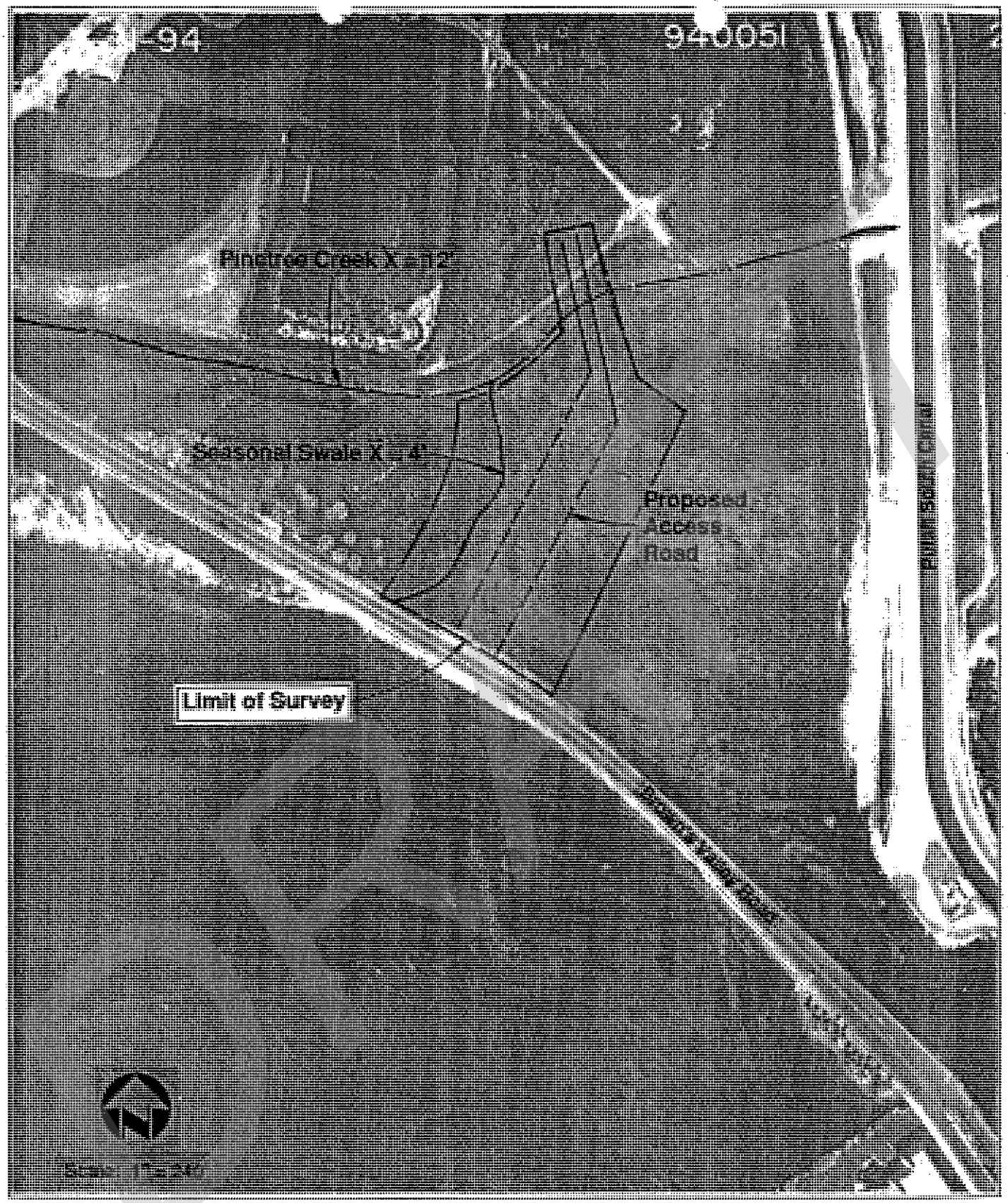
Sincerely,

Matt Gause
Wetland Specialist

MG:mv

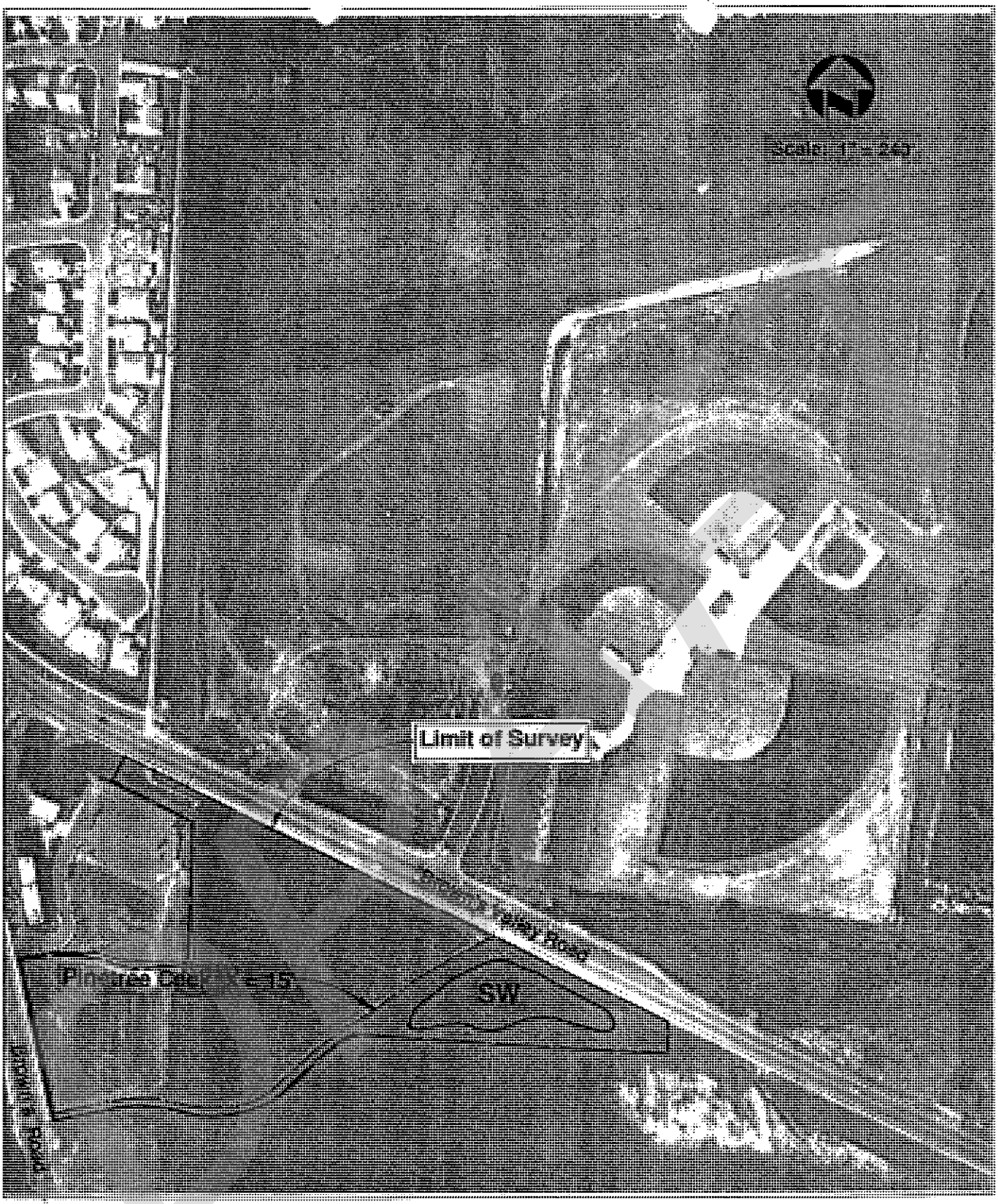
Enclosures

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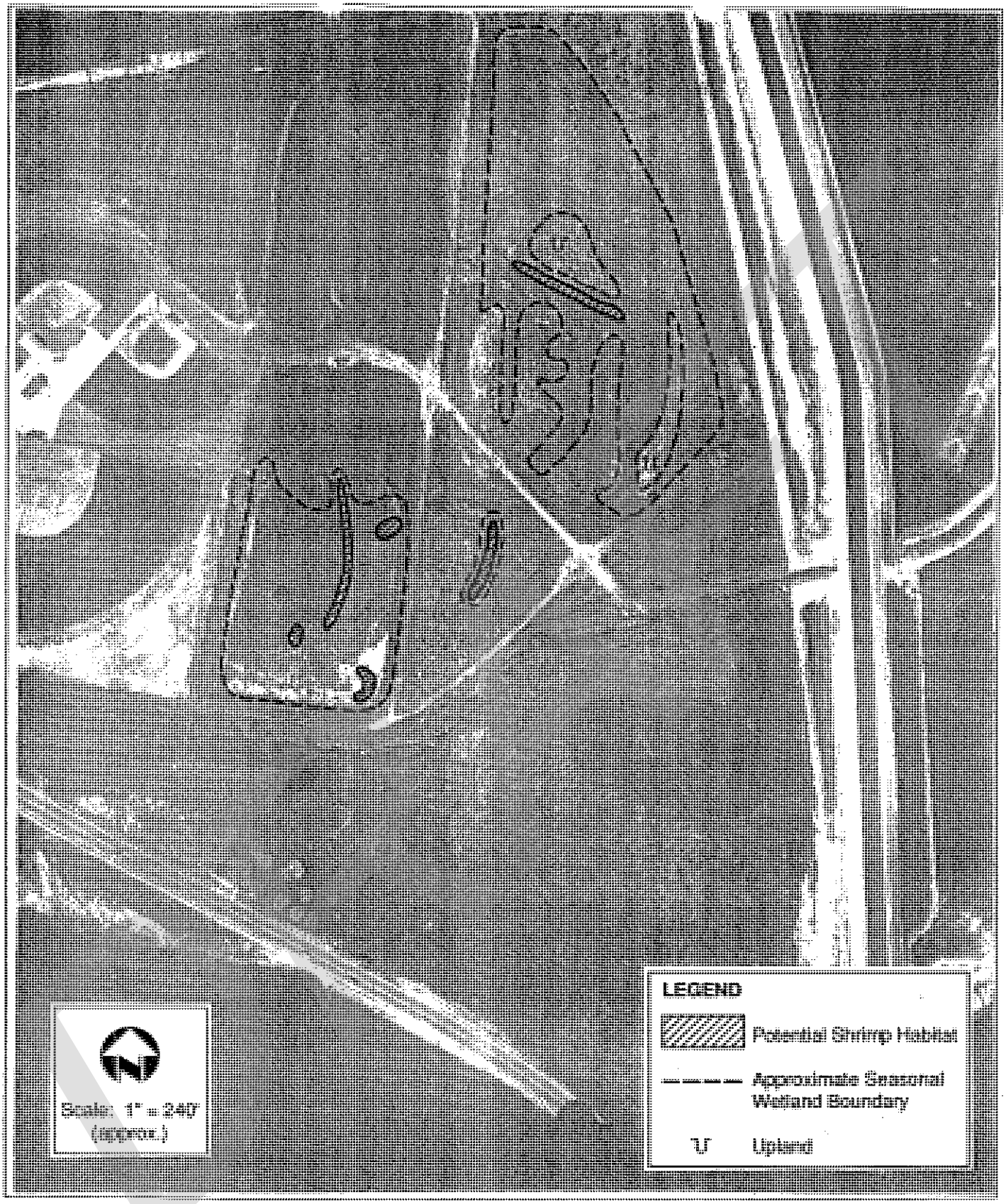
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Figure 1
Wetland Habitats in Vicinity of Proposed Road Alignment



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Figure 2
Wetland Habitats in Vicinity of Proposed Detention Basin



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Figure 3
Potential Shrimp Habitat in Abandoned Ponds at Centennial Park, Vacaville, California

ATTACHMENT G

An Archaeological Study of Centennial Park, Browns Valley Parkway, Vacaville, Solano County, California

DRAFT

Anthropological Studies Center
Sonoma State University Academic Foundation, Inc.
Rohnert Park, California

1997

An Archaeological Study of Centennial Park Browns Valley Parkway, Vacaville, Solano County, California

prepared for

City of Vacaville
650 Merchant Street
Vacaville, California 95688

prepared by

Seana L. S. Gause

Anthropological Studies Center
Sonoma State University Academic Foundation, Inc.
1801 E. Cotati Avenue, Building 29
Rohnert Park, California 94928
ph: (707) 664-2381 fx: (707) 664-4155

This project was completed under the supervision of Dr. Adrian Praetzellis (Member, Society of Professional Archeologists), Director, Anthropological Studies Center

January 1997

Project 50001 3/97

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An Archaeological Study of Centennial Park, Vacaville, Solano County, California

INTRODUCTION

An archaeological study was conducted of the undeveloped portions of Centennial Park, comprising approximately 76 acres, at the request of Wendy Thomas of the City of Vacaville. The purposes of the study, in accordance with the California Environmental Quality Act (CEQA), were (1) to identify and record archaeological and historical sites within the study area; (2) to make preliminary evaluations of their significance; and (3) to recommend procedures for avoidance or mitigation of adverse effects to potentially important cultural resources.

Background research indicated that there had been one previous literature review of the land in question and that no known archaeological or historical resources had been identified in or adjacent to the study area. The consulting archaeologist who performed the literature review recommended that additional study be done prior to further development of the area. As a result of the current study, no archaeological sites were identified, nor were any historical architectural resources identified. There is the possibility, however, that subsurface archaeological deposits are present; see the conclusion of this report for details.

STUDY-AREA LOCATION AND DESCRIPTION

The 76-acre study area is located about 1/2 mile northeast of the intersection of Browns Valley Parkway and Monte Vista Avenue in the city of Vacaville, Solano County, California The property is located within the Los Putos land grant, as depicted on the Elmira, California, and Allendale, California, 7.5'-series topographic quadrangles (1953, photorevised 1968; see map).

The park is located at the western edge of the Central Valley, just east of the English Hills at the foot of a small ridge; elevation of the park is about 150 feet above mean sea level. The soils are light grey brown to tan brown alluvial deposits, containing approximately 45% pea gravels. There are two watercourses within the project area, both of which are channelized and empty into Putah South Canal, outside the park area.

The natural vegetation of the project and surrounding area is California Prairie, a "dense to somewhat open, medium tall buchgrass community with many forbs" (Küchler 1978:23). Within the project area, vegetation is sparse to dense, depending on the amount of landscaping done for development of the park. The undeveloped areas of the park support introduced grasses and forbs. At the south end of the project area, near the channelized creek, riparian trees such as willow, alder, and California Bay are present.

The project area was used previously as a sewage-disposal and a land-fill site. The park has been partially developed, with four baseball diamonds now located where the sewage-disposal pond once was, and a parking lot scheduled to be put over the area previously used for land fill.

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STUDY METHODS

The archaeological study involved two steps: background research, and an on-foot field survey. Prior to the field survey, the author conducted research to determine whether any recorded or otherwise known archaeological or historical resources were located within the study area and to assess the likelihood of unrecorded resources based on the distribution and environmental settings of nearby known sites. This research consisted of (1) a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System; and (2) a review of literature and maps on file at the Anthropological Studies Center, Sonoma State University (see References Consulted). Affiliated with the State Office of Historic Preservation, the NWIC is the official state repository for records and reports of prehistoric and historical archaeology and the built environment for an 18-county service area, including Solano County.

The records search consisted of reviewing historical maps (General Land Office 1865; Henning 1872; and C.F. Webber & Company 1914) and modern inventories, including the *National Register of Historic Places, California Inventory of Historic Resources, California Historical Landmarks,* and *California Points of Historical Interest* listings. The records search indicated that there were no recorded archaeological or historical resources within the study area, nor had the property been surveyed previously for cultural resources. One literature review had been performed by David Chavez, consulting archaeologist, in December 1981. There were no recorded archaeological sites within a 1-mile radius of the project area. Farming and ranching appear to have been the historical use of the study area in the 19th century; no residences are indicated on historic documents.

Ethnographic literature (Johnson 1978; Kroeber 1925) indicates that at the time of historic contact the study area was located within the territory of a Patwin-speaking tribelet. Johnson (1978:350) indicates that *Ululato*, a Patwin village known ethnographically, would have been the closest historically documented site to the project area. The State of California Native American Heritage Commission (NAHC) was contacted and asked to review the Sacred Lands file for cultural resources; Debbie Plias-Treadway of the NAHC found that there were none recorded within the project area.

FIELD SURVEY METHODS

The study area was field-surveyed by the author and Maria Ribeiro of the Anthropological Studies Center on 10 January 1997. The survey was conducted on all areas by walking 10- to 35-meter-wide transects and examining the ground surface for archaeological remains. The areas scheduled for a new access road and detention basins for wetland mitigation were thoroughly examined using 10-meter wide transects. The entire perimeter of the study area was also directly examined. Ground visibility ranged from poor to fair, depending on the vegetative ground cover. Rodent backdirt piles, areas of recent ground disturbance, and drainage cutbanks were examined for indicators of subsurface archaeological sites. Trowels were used periodically to clear vegetation from the ground. Standing goundwater and saturated soils made visibility difficult in some areas.

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STUDY RESULTS AND RECOMMENDATIONS

Background research indicated that the study area had no previously recorded cultural resources. No new cultural resources were recorded as a result of the current study. Because the study area is located in an area of considerable soil deposition, there is the possibility that buried archaeological materials are present below the current ground surface. If ground-disturbing activities are to occur 6 feet or more below surface, archaeological deposits may be encountered. In the event that buried archaeological materials are unearthed, it is recommended that work in the immediate vicinity halt and a qualified archaeologist be contacted to evaluate the finds and make recommendations. Prehistoric materials might include flaked-stone tools (projectile points, knives, scraping tools) or obsidian or chert toolmaking debris; culturally darkened soil ("midden") containing heat-altered rock, shellfish remains and cultural materials; and stone milling equipment (mortars, pestles, handstones, and millingstones). Historical archaeological materials might include stone footings or walls; building remains with square nails; backfilled wells or privies; and other deposits of glass, metal, and/or ceramic refuse.

It is important to note that Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human burial. If human burials are encountered, work should halt in that vicinity and the County Coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of such identification. Appendix K of the California Environmental Quality Act details steps to be taken if human burials are of Native American origin.

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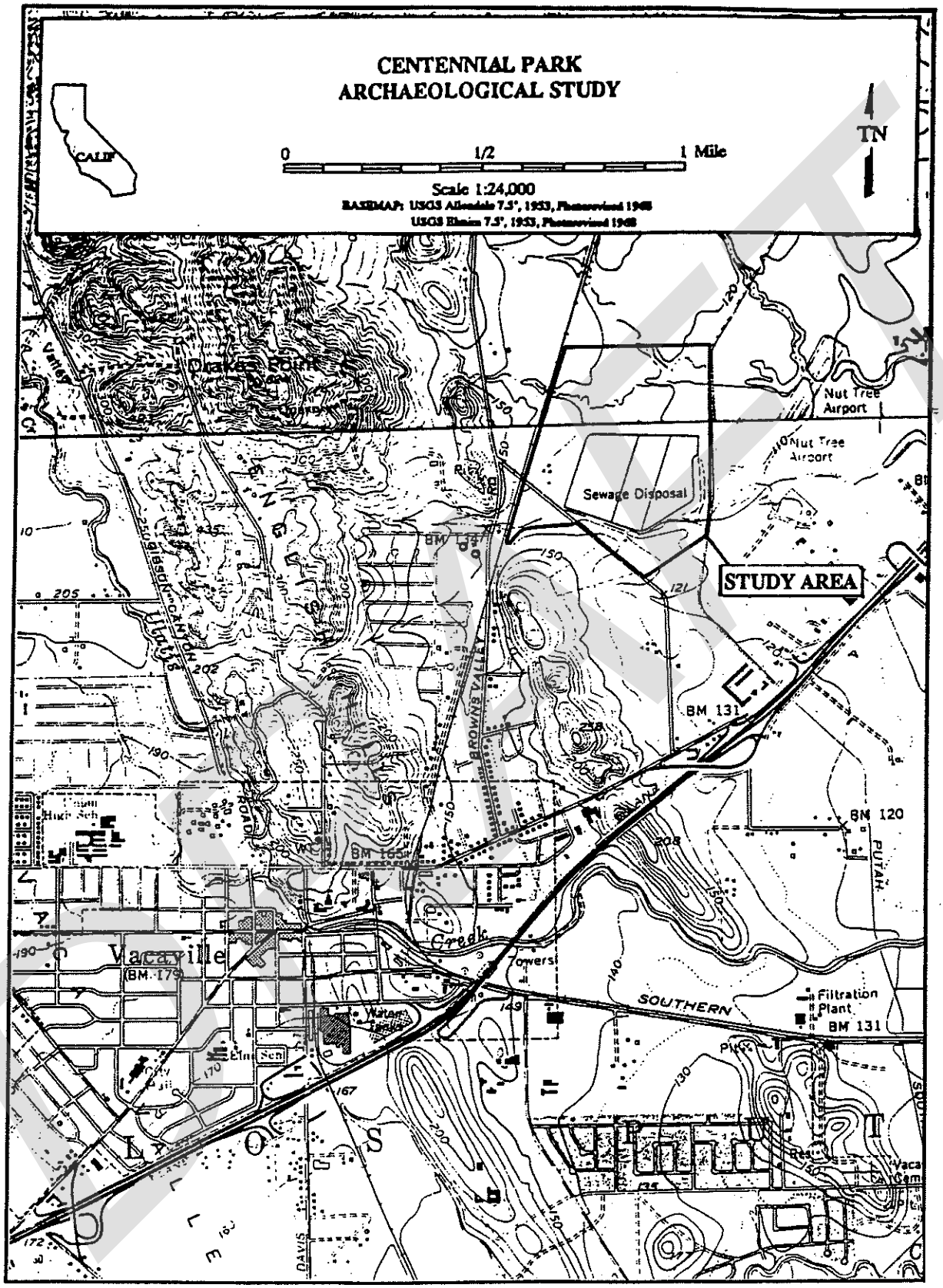
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CENTENNIAL PARK
ARCHAEOLOGICAL STUDY
CALIF
0
1/2
1 Mile
Scale 1:24,000
BASEMAP: USGS Allendale 7.5', 1953, Photorevised 1968
USGS Elmira 7.5', 1953, Photorevised 1968
TN
Drake's Point
Nut Tree Airport
Nut Tree Airport
Sewage Disposal
STUDY AREA
BM 131
BM 120
BM 165
Vacaville
(BM 179)
Creek
SOUTHERN
Filtration Plant
BM 131
PUTAH
BROWNS VALLEY
DAVIS
Glascock Overpass
Ulatis
Elm Sch
Mich Sch

ATTACHMENT F

October 18, 1996

Ms. Wendy Thomas
Planning Department
City of Vacaville
650 Merchant Street
Vacaville, CA 95688

SUBJECT: Centennial Park Wetlands

Dear Ms. Thomas:

On August 27, 1996, a Jones & Stokes Associates wetland specialist and soil scientist conducted a survey of the Centennial Park project site in Vacaville, California. The purposes of the survey were to assess the jurisdictional status of the abandoned sewer ponds, evaluate the site for the presence of suitable habitat for federally listed threatened or endangered shrimp species, and to conduct a reconnaissance-level survey for wetlands at two sites for a proposed access road and detention basin. The methods employed for these studies and the results are detailed below. In addition, potential mitigation options for wetland impacts are described as well as wetland protection measures.

Methods

Jurisdictional Status of Sewer Ponds

The abandoned sewer ponds were assessed for their status as wetlands under the jurisdiction of the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. Wetlands are defined as "areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b], 40 CFR 230.3). To be considered under federal jurisdiction, a wetland must support positive indicators for hydrophytic vegetation, hydric soil, and wetland hydrology as defined in the U.S. Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987).

The routine onsite determination method, based on mandatory technical criteria and field indicators described in the 1987 Wetlands Delineation Manual (Environmental Laboratory 1987), were used as a basis for identifying wetlands. The wetland indicator status of plants was based on Reed (1988). Nonwetland areas potentially subject to federal jurisdiction were evaluated according to various regulatory guidance letters issued by the Corps.

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2600 V Street, Suite 100 • Sacramento, CA 95818-1914 • Fax 916/737-3030 • 916/737-3000

The project area was surveyed on foot on August 27, 1996, to evaluate the extent and types of wetlands present, and to determine appropriate locations for sample data points. Potential wetlands were initially identified by assessing whether hydrophytic vegetation was prevalent or would be expected to be prevalent under normal circumstances and normal conditions (as these terms are defined in Environmental Laboratory [1987]). Sites with a prevalence of hydrophytic vegetation were further evaluated for wetland hydrology and hydric soils.

Soil pits were excavated along transects from obvious wetlands to nonwetlands in the abandoned sewer ponds. At each soil pit, indicators of wetland hydrology and hydrophytic vegetation also were assessed. The edge of the wetland boundary was determined by the last point on the transect that possessed evidence of all three parameters. The proposed sites for an access road and detention basin on county and city property, respectively, were surveyed on foot and areas that may qualify as jurisdictional wetlands were mapped on 1 inch = ±240 feet black and white aerial photographs taken on March 31, 1994.

Habitat Assessment for Federally Listed Shrimp

The vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardi*), and Conservancy fairy shrimp (*Branchinecta conservatio*) are federally listed shrimp which are known to occur in the vicinity of the project area and could potentially be supported by seasonal wetlands on the project site.

The seasonal wetlands were assessed for their suitability as shrimp habitat by observing indicators of ponding duration and depth. Seasonal wetlands that pond water continuously for 14 days or longer at a water depth of greater than 1 inch can be considered suitable habitat for threatened or endangered shrimp that are known from the region (Helm 1996). Under conditions when water temperature, chemistry, and other habitat factors are ideal, some shrimp species may be able to complete their life cycle in fewer than 14 days; however, this is more atypical than typical. Seasonal wetlands that pond water at depths of less than 1 inch typically experience daily and seasonal water temperature fluctuations that are too extreme (e.g., freezing in winter and too warm in spring) to support shrimp (Helm 1996). Seasonal wetlands were visually inspected for evidence indicating depth of inundation, duration of inundation, and presence of exuviae (outer hardened shell of some shrimp species) to determine if they were potential shrimp habitat. Indicators of greater than 14 days of inundation include algal matting and vegetative composition. Indicators of ponding depth include watermarks on woody vegetation, waterlines on rocks or debris, and site micro topography.

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Results

Wetlands

The three mandatory technical criteria for wetlands (prevalence of hydrophytic vegetation, wetland hydrology, and hydric soils) were directly observed or inferred within the abandoned sewer ponds at the project site and were found to be functioning as wetlands under normal circumstances and conditions as defined by the Corps (Environmental Laboratory 1987). Vegetation in the ponds is a mixture of native and non-native hydrophytic vegetation. The wetland affinity of plants in the ponds varies from obligate wetland species (plants that almost always occur in wetlands in normal conditions) to facultative species (plants that occur in uplands as well as wetlands). The dominant plant species in the ponds were swamp timothy (*Crypsis schoenoides*) (obligate wetland species), Italian ryegrass (*Lolium multiflorum*)(facultative species), and lambsquarter (*Chenopodium album*) (facultative species). Soils in the ponds displayed low chroma matrix colors and bright mottles typical of hydric soils and were of a heavy clay texture. Additionally, the soil on which the abandoned sewer ponds are situated is identified as Clear Lake Clay and is listed as hydric on the local hydric soil list produced by the Natural Resource Conservation Service. Hydrologic inputs to the ponds appears to be entirely from rainfall and natural runoff and no evidence of significant artificial hydrologic inputs were found.

The abandoned sewer ponds are functioning as natural seasonal wetlands and their Corps jurisdictional extent is now greater than is indicated in the 1992 wetland delineation (Sugnet & Associates 1992). The increase in the extent of wetlands at the project site may be in response to the resumption of average rainfall in the Sacramento Valley. The delineation in 1992 was conducted after approximately 5 years of drought conditions. The below average rainfall may have precluded the establishment of wetland vegetation in some areas. Evidence for this hypothesis is that swamp timothy, an obligate wetland species, was not recorded during the 1992 delineation. Since that time, swamp timothy (an obligate wetland species) has replaced Italian ryegrass (a facultative species) as the overall dominant in the wetter portions of the ponds indicating that some of the site may now be too wet for Italian ryegrass following normal rain years.

No wetlands were found within the areas indicated for the access road on County property or the presumed location for the detention basin on City property. A small seasonal swale is found to the west of the proposed access road alignment. A seasonal wetland and channelized perennial drainage (Pinetree Creek) are in the vicinity of the area indicated as the potential site for a detention basin. These wetland features are indicated on Figures 1 and 2 for reference. These wetlands would need to be avoided during construction and protected following the measures identified under Wetland Protection below.

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Shrimp habitat

Several seasonal wetlands at the project site could serve as suitable habitat for federally listed shrimp species. The majority of suitable shrimp habitat (approximately 0.15 acre) is found scattered in the lowest lying areas of the abandoned sewer ponds (Figure 3). Although not pristine habitat, these areas nonetheless possess adequate depth and support ponding for a long enough duration for shrimp species to complete their life cycle. As identified in Sugnet & Associates (1992) the small seasonal wetland in the northern portion of the project site is also suitable habitat for shrimp species.

Because the site supports potential habitat for federally listed shrimp which are known to occur in the project vicinity, two options are available for federal Endangered Species Act (ESA) compliance. The first option is the project proponent can assume that all seasonal wetlands suitable for federally listed shrimp on the project site do support shrimp. Under the second option, the project proponent can hire a qualified biologist who possesses a valid Section 10(a)(1)(A) shrimp take permit to conduct surveys for the presence or presumed absence of shrimp.

If the project proponent assumes that the seasonal wetlands at the site support shrimp, then the project is subject to ESA compliance which includes formal consultation between the U.S. Fish and Wildlife Service (USFWS) and the Corps and compliance with mitigation requirements for listed shrimp. Presently, the Sacramento field office of the USFWS has a programmatic consultation on issuance of Section 404 permits for projects with small effects to vernal pools. However, for the programmatic consultation to be implemented, the project must have less than 1 acre of impacts to shrimp habitat. Impacts include both direct and indirect effects to the habitat under the programmatic consultation. Under this programmatic consultation, for every acre of habitat directly or indirectly affected, at least 2 acres must be dedicated in an offsite preserve. In addition, for every acre of habitat directly affected, at least 1 acre of habitat must be created offsite or at least 2 acres created onsite.

On the other hand, if the project proponent chooses to survey for shrimp, the USFWS gives two survey choices; wet-season sampling or dry-season sampling. Wet-season sampling must be conducted for 2 years within a 5-year period. Wet-season surveys are initiated when the pools fill and are conducted at 2 week intervals until the pools dry. Dry-season sampling entails the collection soil from the seasonal wetlands and subsequent analysis of the soil samples for shrimp cysts (eggs). Dry-season sampling can only be conducted in conjunction with wet sampling for 1 year.

Upon completion of 2 years of wet-season sampling or a combination of wet- and dry-season sampling and if no adult shrimp or their cysts are detected and the USFWS approves the surveys, the project is not subject to ESA requirements regarding listed shrimp. However, if federally listed shrimp are found at the project site, then the project is subject to ESA compliance through programmatic consultation, if appropriate, or through formal consultation with the USFWS and the Corps.

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Wetland Mitigation Options

According to the Memorandum of Agreement between the Corps and Environmental Protection Agency, the proper sequence of mitigation priority in project design is to:

- first, avoid adverse effects on wetlands;
- second, if avoiding adverse effects is not practicable, minimize effects on wetlands to the extent practicable; and
- third, compensate for those impacts on wetlands that are unavoidable.

In short, every effort to minimize impacts to wetlands on site should be pursued. Reducing the amount of jurisdictional wetland acreage impacted will reduce the amount of mitigation required. For those wetland areas that cannot be avoided, several options are available to compensate for their loss. These options are:

- create and maintain seasonal wetlands at a suitable location offsite;
- participate in a USFWS and Corps approved mitigation bank; or
- create suitable mitigation wetlands onsite.

Creation of wetlands offsite also requires that a suitable parcel of land (i.e., suitable soils, topography, and hydrology) is available for the mitigation project. The creation, maintenance, and monitoring of seasonal wetlands offsite can be costly and the success of the created habitats is not guaranteed. Participation in a mitigation bank is a another opportunity for mitigation, however, currently there is not a permitted bank within a 40-mile radius of the project site as required by California Department of Fish and Game (DFG) mitigation banking guidelines. Participation in a mitigation bank also requires that the sequencing approach to wetland mitigation as mentioned above is followed. Participation in a mitigation bank for impacts to wetlands at the Centennial Park site appears to be a feasible option. Roger Schoonover of DFG in Solano County indicated in a September 11, 1996 telephone conversation that participation in the Wildlands Inc. mitigation bank in Placer County would be possible even though it is outside the 40 mile maximum radius. Three other potential mitigation banks, two in Sacramento County and one in Solano County, are pending approval from state and federal agencies at this time. Following approval, these banks could be other viable options for offsite mitigation.

Based on the future plans for the Centennial Park site, the opportunities for onsite mitigation are minimal; however, if those plans were to evolve to include wetland mitigation, the soils on site could support seasonal wetlands.

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Impacts to federally listed shrimp species, if present, can also be accomplished through onsite mitigation, offsite mitigation, or the purchasing of credits in a USFWS-approved shrimp mitigation bank.

Currently, only one mitigation bank was able to give a quote on the cost of mitigation credits for wetlands. This mitigation bank for vernal pools operated by Wildlands Inc., is located in Rocklin, California and credits are $70,000 each. The exact number of credits that may be required for this project are subject to negotiation with the Corps and USFWS; however, the number of credits would likely not exceed two times the number of acres affected. If the location for offsite preservation has not been determined or is not currently available, the project proponent can enter into a three-way agreement with the USFWS and The Nature Conservency . Under this agreement, the proponent "banks" its money with The Nature Conservency and the USFWS for future investment into a suitable mitigation bank. The amount of money required for this is determined through negotiations with the USFWS.

Detailed design and construction of seasonal wetlands onsite or offsite costs approximately $20,000 to $30,000 per acre. Monitoring of the constructed wetlands on an annual basis can range from approximately $7,000 to $15,000 depending on the number of parameters to be monitored. Seasonal wetland monitoring is typically required for a period of 5 years.

Wetland Protection Measures

Wetlands should be protected from inadvertent construction related impacts. An option for protection involves erecting high visibility exclusion fencing around the wetland to be protected. Protection fencing that has been used on other projects with success is Visi Barrier, model number XL5210 (available through Dura Fence Company, Sacramento) fastened to metal T-posts. Fencing should be placed so that there is approximately a 25-foot buffer between the wetland boundary and construction activity. The exact location for the protection fencing should be staked or flagged in the field by a qualified wetland specialist and fence should be installed by a qualified contractor. Fencing should be removed following construction.

In addition to fencing, every effort should be made to prevent construction tailwater, sediment, or other artificial hydrologic or material inputs to the wetlands. This can be accomplished by erecting sediment control fencing or placing hay bales in swales or drainages feeding the wetlands.

Grading of the surrounding watershed of the abandoned ponds does not appear that it would affect the wetland's hydrologic regime. Field investigations did not reveal evidence that the wetlands' hydrology is significantly dependent on runoff from the surrounding watershed, instead it appears that the wetlands' hydrology is driven by direct rainfall. Because of the extremely high clay content of the soils in the abandoned ponds, it appears that once saturated by rainfall any

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additional rainfall would readily pond. Additionally, construction of the softball facilities immediately to the west do not appear to have affected the hydrology of the ponds. Therefore, assuming a buffer is established between grading activities and the wetland boundary during construction, it is unlikely that grading will have any effect on wetland hydrology.

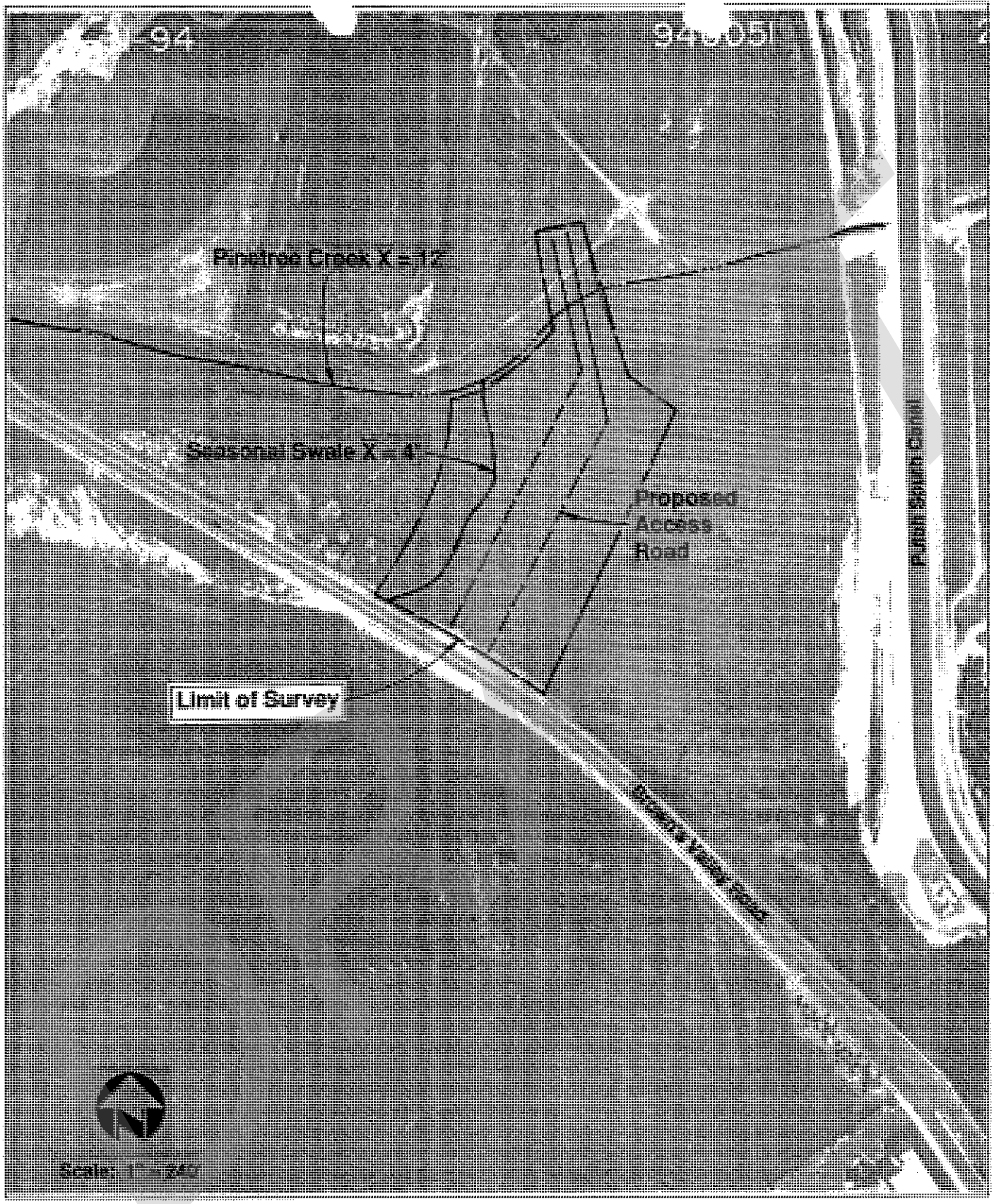
Sincerely,

Matt Gause
Wetland Specialist

MG:mv

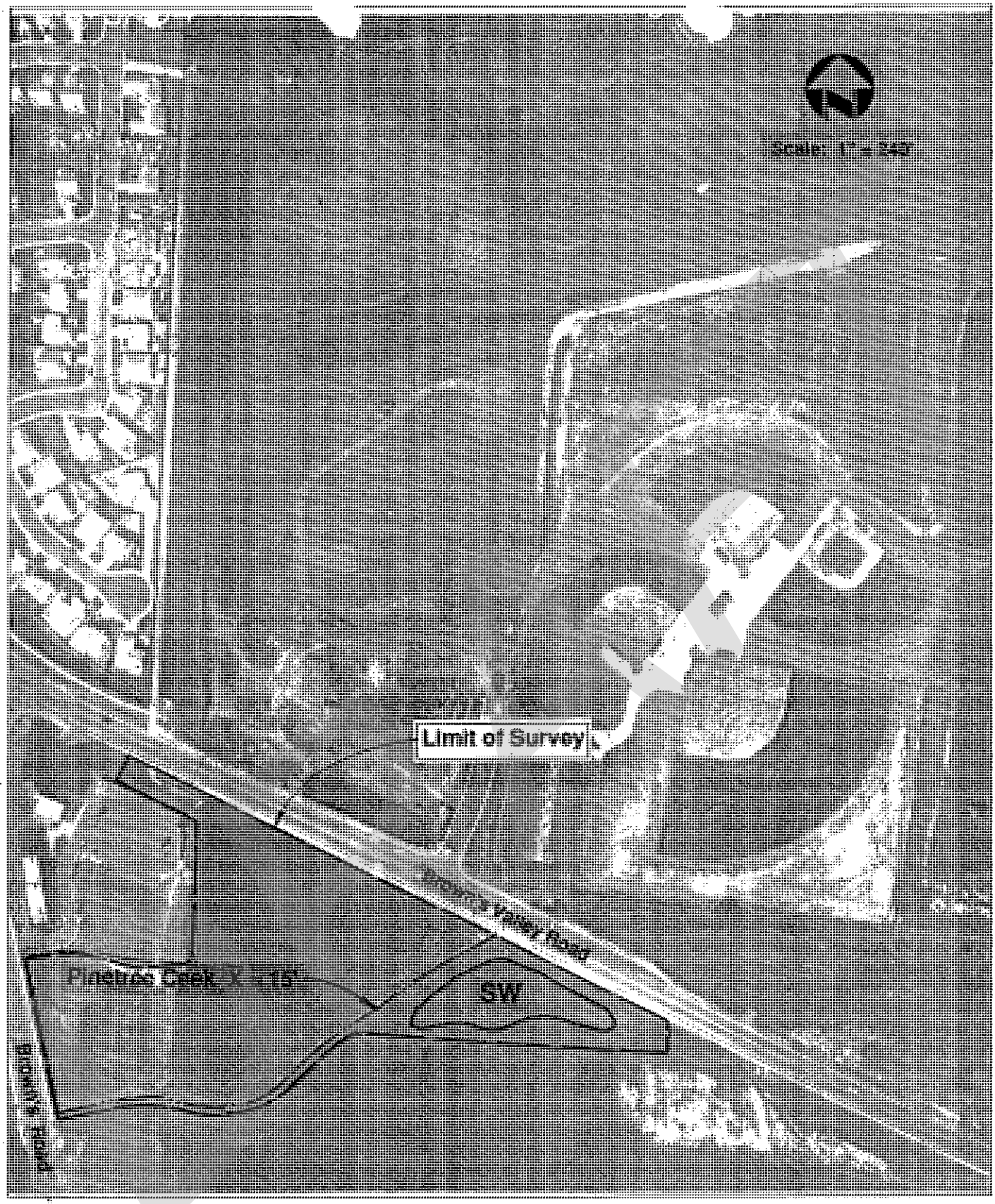
Enclosures

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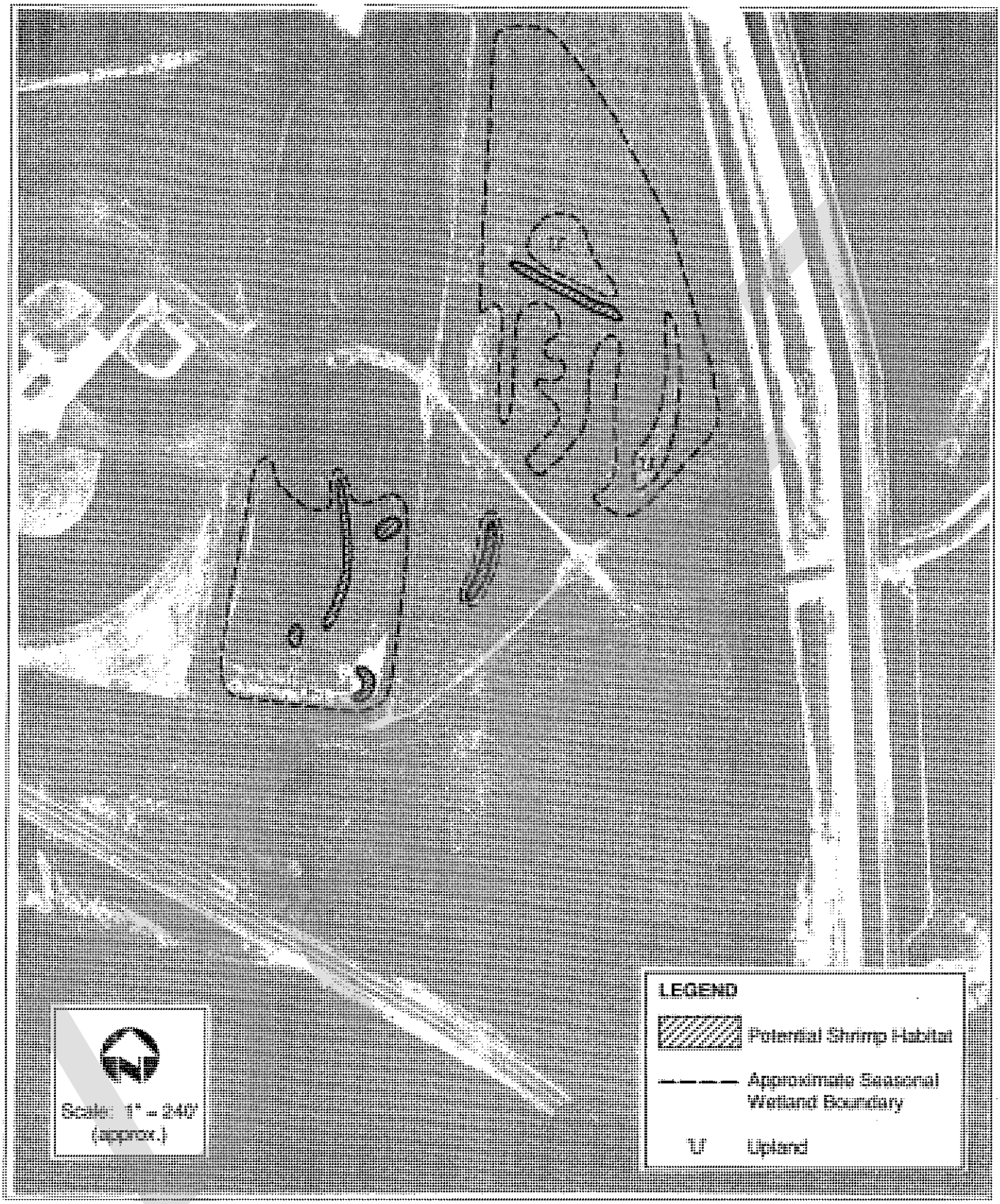
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Figure 1
Wetland Habitats in Vicinity of Proposed Road Alignment



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Figure 2
Wetland Habitats in Vicinity of Proposed Detention Basin



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Figure 3
Potential Shrimp Habitat in Abandoned Ponds at Centennial Park, Vacaville, California

PHASE I ENVIRONMENTAL SITE ASSESSMENT

CENTENNIAL PARK SITE
VACAVILLE, CALIFORNIA

PREPARED FOR:

City of Vacaville

FA Project #SF053-004
April 7, 1997

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FAULTLINE ASSOCIATES, INC.

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

CENTENNIAL PARK SITE

VACAVILLE, CALIFORNIA

I. INTRODUCTION AND PURPOSE

This report presents the results of a Phase I Environmental Site Assessment performed for the Centennial Park property located east of the confluence of Browns Valley Road, Browns Street, and Browns Valley Parkway, Vacaville, California. The subject site is located within the Vacaville city limits approximately .05 miles north of Interstate 80 (Figure 1). The site is situated within Solano County, California. The site is listed under APN 129-220-030 and 040 in the County of Solano Assessors book.

FAULTLINE Associates, Inc. (FA) has prepared this Phase I Environmental Site Assessment (PI-ESA), as authorized by the City of Vacaville Department of Housing and Redevelopment (CLIENT), in accordance with the current standard environmental assessment practices in the region.

The purpose of the ESA is to identify the potential presence of hazardous wastes or substances and/or related present or past activities which might be a source of contamination on the subject site or in the site vicinity.

II. SCOPE OF WORK

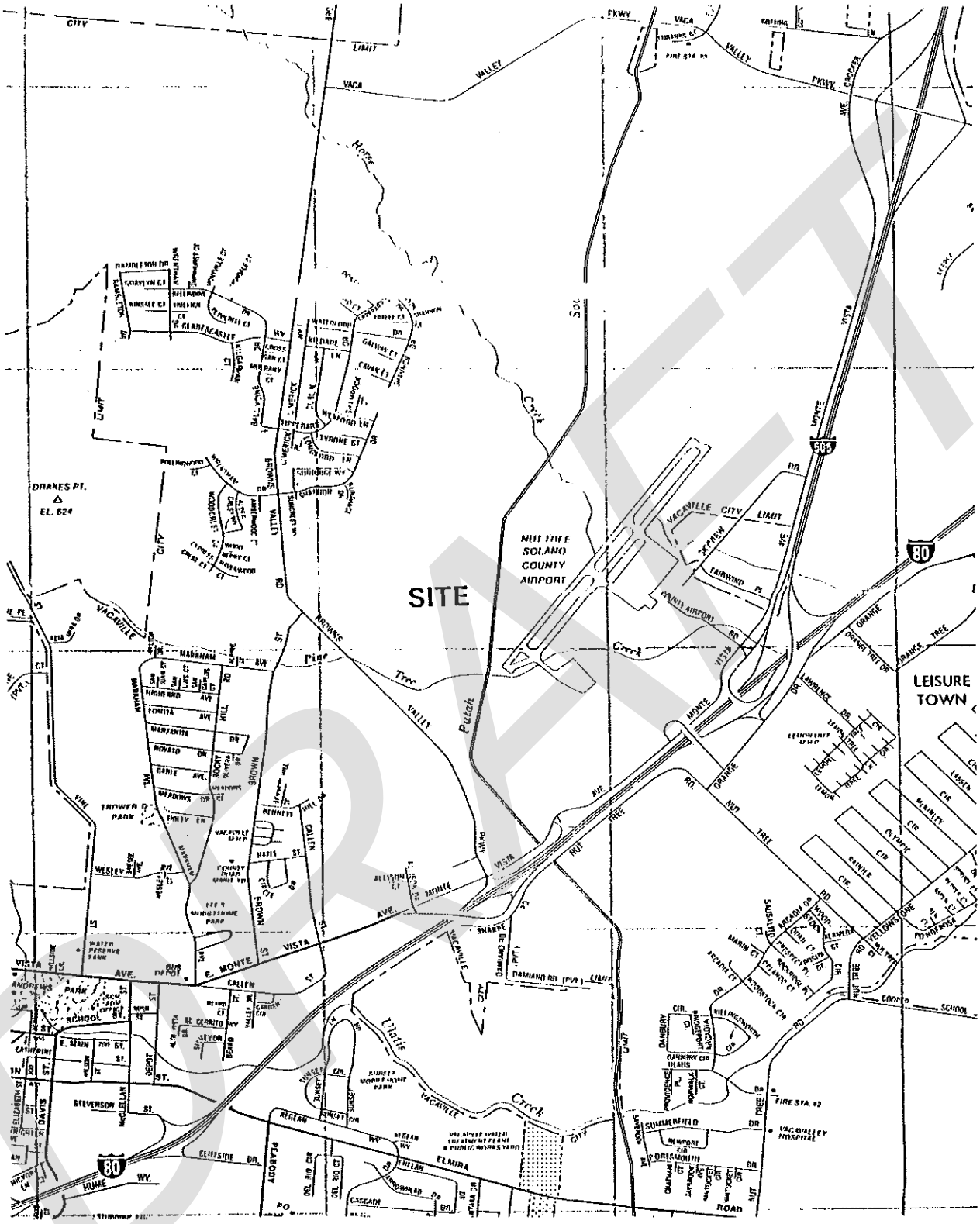
In accordance with our proposal dated March 6,1997 this PI-ESA consists of the following tasks:

1. Provide a site overview to include location, description of adjacent properties, and a general description of the project site.

2. Provide available data on the history and operations of the subject site.

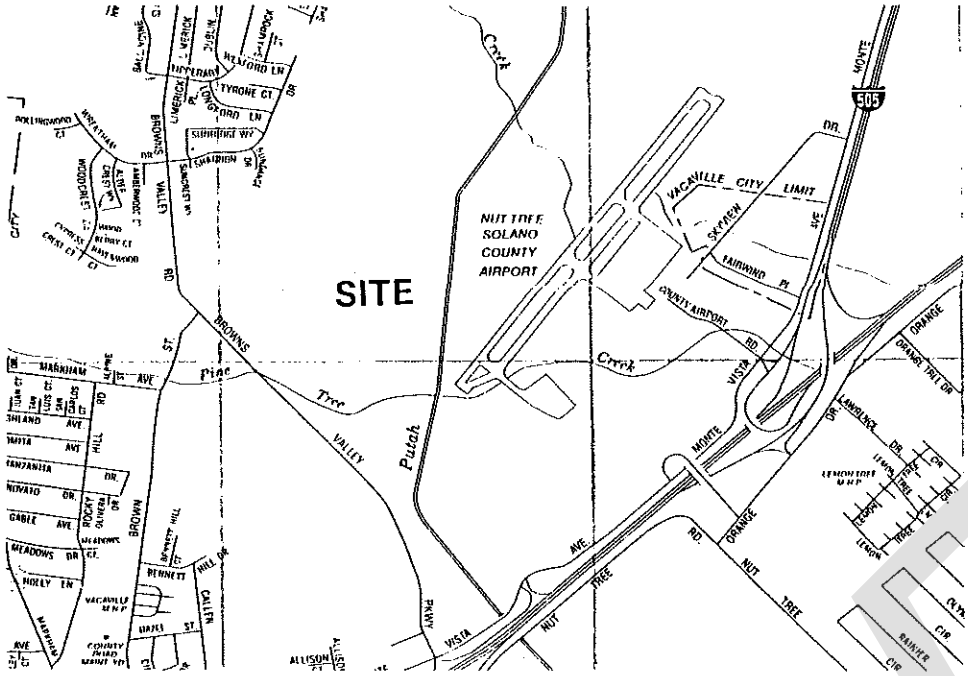
3. Present reference data on the environmental setting including general information on surface topography, soil conditions, groundwater conditions, and any pertinent data from third party consultants or agencies.

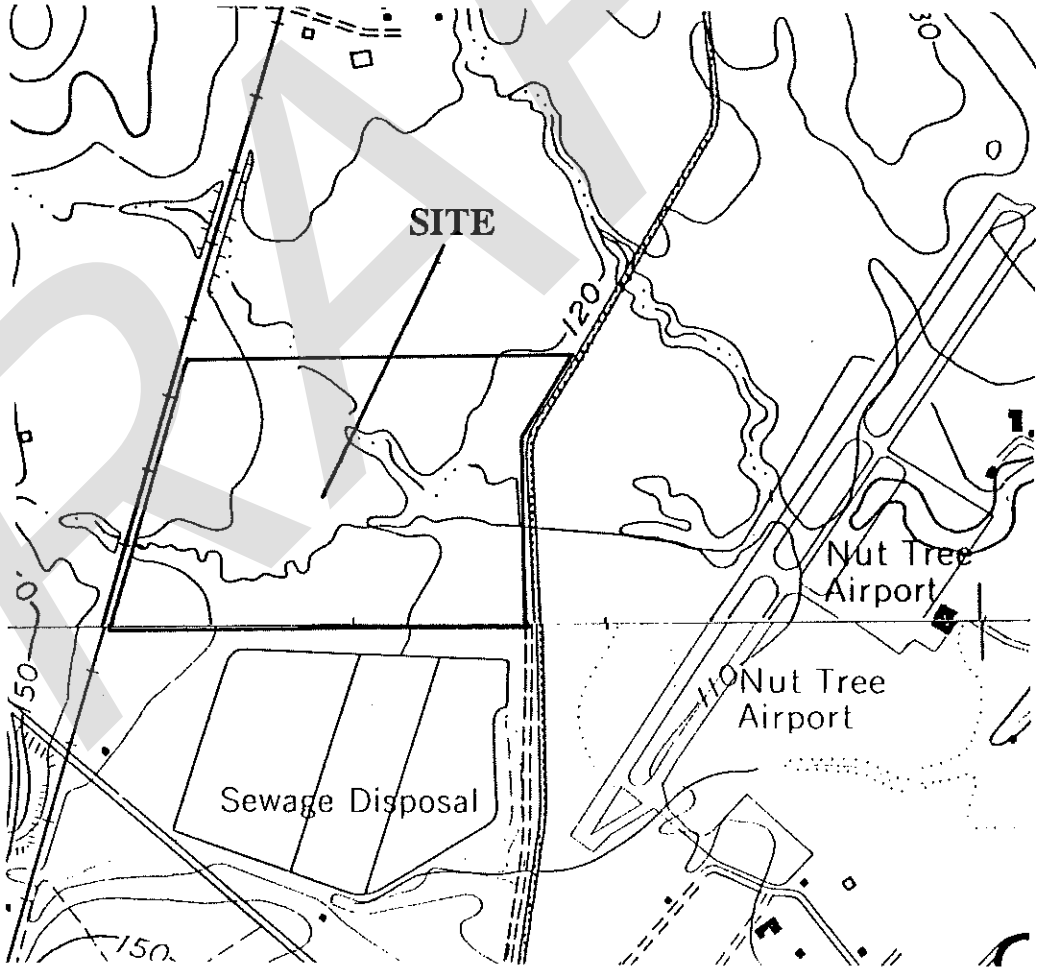
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FAULTLINE Associates, Inc. 1630 N. Main St., Walnut Creek, CA 94596	Project Name: Centennial Park ESA	Figure: 1	N
	Project Number:	Date: Apr. 7, 97	Site Location
	Drawn By:	Reviewed By:	





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FAULTLINE Associates, Inc. 1630 N. Main St., Walnut Creek, CA 94596	Project Name:		Figure:
	Project Number:	Date:	N
	Drawn By:	Reviewed By:	

4. Provide results of the following investigation activities:

   a. Investigate waste site database (VISTA) or other published information regarding waste sites in the area of the subject site.

   b. Perform reconnaissance and traverses of the parcel and the surrounding areas. Observe site conditions for evidence of past activities which suggest the handling of hazardous wastes or hazardous substances.

   c. Review available aerial photographs of the site over the past history of site activity.

   d. Contact regulatory agencies and other parties with knowledge of past site and site area activities. Review agency files as appropriate.

5. Prepare a discussion focusing on potential pollutant sources and hazardous material/waste activities on or near the project site.

6. Prepare this report upon the completion of the five previous tasks and include our findings and conclusions regarding the potential for contamination of each site and/or site area from the information collected.

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III. SITE OVERVIEW

A. Location and Description

The project site consists of three rectangular shaped parcels totaling 70 acres. The site rests at an elevation of approximately 120 feet above mean sea level (U.S. Geological Survey, 1973). The subject property is bounded to the north by open undeveloped fields, by the south by a city park/athletic fields, the east by Putah Canal and the Nut Tree Airport, and the west by a PG&E easement, Southern Pacific Railroad right-of-way, and residences. The topography of the site is generally flat with little or no relief. Development in the direct vicinity of the subject property is comprised of residential and commercial/industrial facilities. Browns Valley Parkway and Interstate 80 are the main thoroughfares near the subject site.

B. Project Area History

This sparsely populated area of Solano County has been dominated by agricultural development since 1920. Significant residential and commercial development of the area began in the 1960's. The subject property has historical agricultural usage as an orchard, although the parcels have been void of any development since at least 1950.

C. Site Geologic Setting

The subject sites are located along the western edge of the Great Valley geomorphic province between the Coast Range Mountains to the west and the Sierra Nevada Mountains to the east. The Great Valley geomorphic province, including the Sacramento and San Joaquin Valleys, is a large alluvial plain approximately 400 miles long and 50 miles wide extending through the center of California. The Sacramento Valley is a 5,000 square mile alluvial basin that is drained primarily by the Sacramento River. The Vacaville portion of the Sacramento Valley is an extensive alluvial plain. This plain was formed by frequent overflow and deposition during periods of flooding. The active Green Valley Fault and Cordelia Fault Zone are located approximately 13 and 9 miles, respectively, west of the subject sites.

Cretaceous Age sediments of the Great Valley Sequence, which crop out in the Coast Range north of the site, and Tertiary Age rocks of the Sonoma Volcanic Series, form the bedrock units that underlie the Vacaville area. The sedimentary rocks of the Great Valley Sequence include sandstone, shale, conglomerate, and limestone. The overlying alluvium consists of clays with sand and gravel lenses.

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D. Site Hydrologic Setting

The subject sites are at an elevation of approximately 120 feet above mean sea level. Surface runoff in the subject site area flows north to south from the northern property boundary. Surface runoff drains to the lower tributary of Horse Creek.

Available data pertaining to the groundwater conditions in the immediate area of the subject site indicate a depth to the first groundwater table of approximately 93 to 108 feet below ground surface (*Balbi & Chang Report of Well Logging and Groundwater Quality Analysis, June 15, 1994*). Groundwater flow direction is assumed to be toward the south and south-east.

E. Environmental Setting

The subject site is located in a semi-rural area with residential and commercial facilities situated within the general vicinity. The site is relatively level with little or no relief. The site is covered with lush vegetation and is surrounded by small water bodies (Horse Creek, Putah Canal, and Pine Tree Creek).

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IV. RESULTS OF FIELD INVESTIGATIONS

A. Site Reconnaissance

Site reconnaissance of the subject property was conducted on March 13, 1997. Inspection of this parcel was conducted from site reconnaissance and by observations on aerial photographs. The assessment site is situated on three rectangular shaped parcels which are adjoining each other. This Phase I Environmental Site Assessment did not include soil, water or Asbestos Containing Materials (ACM) sampling.

B. Site Audit/Inspection Findings

Potential environmental risk observations were made during the site inspection that took place on March 13, 1997. The following is a list of environmental hazards that are commonly addressed in a Phase 1 Environmental Site Assessment. Their presence in this section does not necessarily imply their presence on this particular site unless otherwise noted.

- **Asbestos**

  Any structure built before 1978 has the potential to contain asbestos containing materials (ACM) as an insulating component and may also exist in flooring tiles and roofing materials. There are no structures located on the subject site.

- **PCB's**

  Overhead electrical lines exist at the western border of the assessment site. Electrical transformer boxes are the primary source of PCB's as a contaminant source. Three such boxes were observed on or near the subject property. All transformer boxes were noted to be in tact and without obvious leaks.

- **Underground Structures**

  No subsurface structures were found at the site.

- **Groundwater Wells**

  No groundwater wells were observed at the site during inspection activities. However, one domestic water well was observed at the "park" parcel located directly south of the site.

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- **Spills**

  No discoloration or stressed vegetation often associated with spilled wastes was observed during the site inspection.

- **Air Emissions**

  No air emission issues were observed at the site. The closest facilities (Chiron, Alza, and Basic American Foods) which may generate fugitive emissions are located over .75 miles from the subject site. Migration of any possible unabated fugitive emissions to the site is highly unlikely as most emission fallout occurs within 250 feet of the source area.

- **Water Supplies**

  Water is not supplied to the subject site.

- **Hazardous Materials**

  No hazardous waste materials were observed at the subject site.

- **Radon**

  Radon is a radioactive gas released during the decay of uranium. It can build up in homes and other structures underlain by uranium-bearing rocks. These rocks are commonly associated with granitic plutons such as the Sierra Nevada Batholith. Occurrences in a sedimentary basin such as the Vacaville area have not been identified and the risk is therefore minimal. There has been uranite found in gold-bearing sedimentary deposits, although it is not common.

- **Lead**

  No evidence, either historical or current, of any lead tainted paint use or storage at the subject property was observed.

- **Sewer System**

  The subject site does not utilize a sewer system. All surface runoff is drained to the lower tributary of Horse Creek.

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- **Surface Drainage**

  All surface runoff is drained to the lower tributary of Horse Creek.

- **Miscellaneous Concerns**

  A regional thrust zone located southwest of the property may exhibit seismic activity in the future.

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V. REGULATORY AGENCY CONTACTS, LIST AND FILE REVIEW

Agency contacts were made and available lists of known active and abandoned hazardous waste/material sites were reviewed in order to compile a list of potential sources of contamination in the vicinity of the site. The lists reviewed and sites identified within one-half mile of the project site are presented in the VISTA database report Appendix A. In addition to the VISTA database search, we reviewed site area files and lists at the Solano County Department of Environmental Management (SCDEM). This section presents information gathered as a result of the list review and additional file inspection at SCDEM as well as discussions with regulatory agencies with jurisdiction in Solano County.

A. List Review

The following are the lists reviewed during this phase of investigation and the corresponding sites within approximately one mile of the subject site.

CERCLIS	Contaminated Sites under CERCLA (1980)
NPL	Federal Superfund Sites List
TSD	Facilities that treat, store, or dispose of hazardous waste
CORRACTS	Facilities under RCRA corrective actions
SPL	Sites prioritized by the State for cleanup
SCL	Sites under review by the State
SWLF	Sites permitted as solid waste landfills, incinerators, or transfer stations
TOXIC PITS	Toxic Pits cleanup facilities
TRIS	Facilities with toxic chemical releases, and inventories
UST/AST	Sites with registered underground or aboveground storage tanks
CORTESE	Hazardous Waste & Substances Site List
ERNS	Sites with previous hazardous materials spills
GNRTR	Sites that generate large or small quantities of hazardous waste
LUST	Leaking Underground Storage Tanks - San Francisco - Region 2, Leaking Underground Tank List
LUFT	Leaking Underground Fuel Tank List, Solano County

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B. Regulatory and Public Entity Contacts

Several contacts were made to locate past records and information, and to determine the current status of the sites shown on the hazardous waste/materials site lists described above. Selected files of SCDEM were reviewed and are discussed below.

Vacaville Landfill (Browns Valley Site)
Browns Valley Road
Vacaville, CA

Vista Information Solutions report dated March 14, 1997 listed this property as a Permitted Solid Waste Landfill (SWLF) site. This site is situated directly south of the subject parcels and given the assumed groundwater flow direction of south/southeast, it is presumed to be down-gradient of the subject parcels. SCDEM files indicate that several site investigation episodes have occurred at this site between 1990 and 1994. Soil bores and landfill gas probes were installed in order to defined and delineate potential contamination. The results of the investigative efforts concluded that the site did not meet prerequisites for corrective action. The site is currently being monitored for methane gas production and under review for closure.

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VI. AERIAL PHOTOGRAPH REVIEW

Aerial photographs taken in 1996, 1991, 1982, 1970, 1963, and 1958 were reviewed at Pacific Aerial Surveys in Oakland, California. The following section summarizes the pertinent details of site and surrounding area activities as they appeared on these photographs.

1996; July 3, Photo I.D. #AV5140-37-10, (1;24,000)

The subject property and surrounding structures appear as they do today.

1991; June 14, Photo I.D. #AV4070-33-15, (1:12,000)

The subject property is barren as is the city park located directly south. Development in the direct vicinity of the subject property is comprised of residential and commercial/industrial facilities.

1982; February 6, Photo I.D. #AV2050-11-06, (1:7,200)

The subject property is barren. The waste treatment facility is still in place although it appears to be inactive. The waste water ponds are filled in. Development of residences and commercial buildings in the general vicinity is limited.

1970; September 2, Photo I.D. #AV965-11-09, (1:24,000)

The site does not appear in this photograph.

1963; July 22, Photo I.D. #AV550-13-02, (1;12,000)

The subject site is barren. The adjacent site and associated waste treatment facility is in place and appears to active ti a limited degree. Three waste water ponds are present as is the landfill. There are no homes located within the general area. Commercial development is limited.

1958; March 2, Photo I.D. #SF Area 3-1, (1;36,000)

The subject site is barren. The adjacent site and associated waste treatment facility is in place and appears to active. Three waste water ponds are present although the landfill appears to be under development. There are no homes or commercial facilities located within the general area.

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VII. CONCLUSIONS AND RECOMMENDATIONS

The summary and conclusions presented in this section are based on observations, field reconnaissance descriptions, regulatory file review, and interpretations delineated and developed in the body of this report. The following are key conclusions for the site assessment performed:

- The site survey detected no visual or olfactory evidence of hazardous material/waste impacts to the site surfaces, soils or air quality.

- Based on the regulatory file review and evaluation of the Vista data base, neither the native soils or the localized groundwater in the general vicinity has been impacted by any generated chemicals of concern from up or cross gradient sites.

Definitive conclusions regarding the subsurface conditions related to environmental concerns at the subject site are beyond the scope of this project as no soil or water sampling was included in this scope of work.

It is the opinion of FAULTLINE Associates, Inc., that this site presents no environmental exposure risk, therefore no recommendations for future investigation, monitoring, or corrective action are made as part of this report.

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VIII. REPORT LIMITATIONS

This report has been prepared for the exclusive use of authorized representatives of the City of Vacaville Department of Housing And Redevelopment, with specific application to the subject site in Vacaville, California. The use of this report, its contents, or any part of it, or its agents, other than the ones for whom this report is prepared, is herewith disallowed.

In part, these findings, conclusions, and recommendations are based on the best available information known or made available by regulators, other consultants, or other sources. Over time, the surficial evidence of some activities are obscured or obliterated entirely. It is possible that certain adverse conditions could exist at the site which were not detected in this evaluation.

The services provided under this contract as described in this report include professional opinions and judgments based on data collected. These services have been performed according to generally accepted assessment practices. The opinions and conclusions contained in this report are typically based on information obtained from:

1. Observations and measurements by field staff
2. Contacts and discussions with regulatory agencies and others
3. Review of available hazardous substance or solid waste site lists
4. Opinions and judgments of our personnel based on available information.

The Client has retained FAULTLINE Associates Inc. for the sole purpose of assisting the Client in evaluating the environmental liability associated with the project site. It is recognized and agreed that FA has assumed responsibility only for performing this investigation and presenting this report and conclusions to the Client. The responsibility for making any further evaluation, disclosure, or report to any third party or for the taking of corrective, remedial, and/or mitigative action shall be solely that of the Client. The Client agrees to hold FA harmless from any and all liability, damage, loss, cost, or expense, including attorney fees, in any way arising from the claim of any third party. FA agrees not to make, except to the Clients' request, any report to any third party not legally required of it.

Respectfully Submitted

FAULTLINE Associates, Inc.

David C. Solis, P.E.
Sr. Project Manager

Philip L. Chang, P.E.
Principal Engineer

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APPENDIX A

Vista Site Assessment Plus Report
March 14, 1997

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SITE ASSESSMENT PLUS REPORT

PROPERTY INFORMATION	CLIENT INFORMATION
Project Name/Ref #: SF053-003 BROWNS VALLEY RD LANDFILL BROWNS VALLEY RD VACAVILLE, CA 95688 Latitude/Longitude: (38.374862, 121.972614)	DAVID SOLIS FAULTLINE ASSOCIATES-WALNUT CR 1630 N MAIN ST WALNUT CREEK, CA 94596

Site Distribution Summary Agency / Database - Type of Records			within 1/8 mile	1/8 to 1/4 mile	1/4 to 1/2 mile	1/2 to 1 mile
A) Databases searched to 1 mile:						
US EPA	NPL	National Priority List	0	0	0	0
US EPA	CORRACTS	RCRA Corrective Actions	0	0	0	0
US EPA	TSD	RCRA permitted treatment, storage, disposal facilities	0	0	0	0
STATE	SPL	State equivalent priority list	0	0	0	0
B) Databases searched to 1/2 mile:						
US EPA	CERCLIS	Sites under review by US EPA	0	0	0	-
STATE	SCL	State equivalent CERCLIS list	0	0	0	-
STATE REG CO	LUST	Leaking Underground Storage Tanks	0	0	0	-
STATE/ REG/CO	SWLF	Permitted as solid waste landfills, incinerators, or transfer stations	1	0	0	-
STATE	DEED RSTR	Sites with deed restrictions	0	0	0	-
REGIONAL	NORTH BAY	Sites on North Bay Toxic List	0	0	0	-
STATE	CORTESE	State index of properties with hazardous waste	0	0	0	-
STATE	TOXIC PITS	Toxic Pits cleanup facilities	0	0	0	-
C) Databases searched to 1/4 mile:						
US EPA	RCRA Viol	RCRA violations/enforcement actions	0	0	-	-
US EPA	TRIS	Toxic Release Inventory database	0	0	-	-
STATE	UST/AST	Registered underground or aboveground storage tanks	0	0	-	-
D) Databases searched to 1/8 mile:						
US EPA	ERNS	Emergency Response Notification System of spills	0	-	-	-
US EPA	GNRTR	RCRA registered small or large generators of hazardous waste	0	-	-	-

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This geographic database search meets the American Society for Testing Materials (ASTM) standards for a government records review. A (-) indicates the search distance exceeds ASTM search parameters.

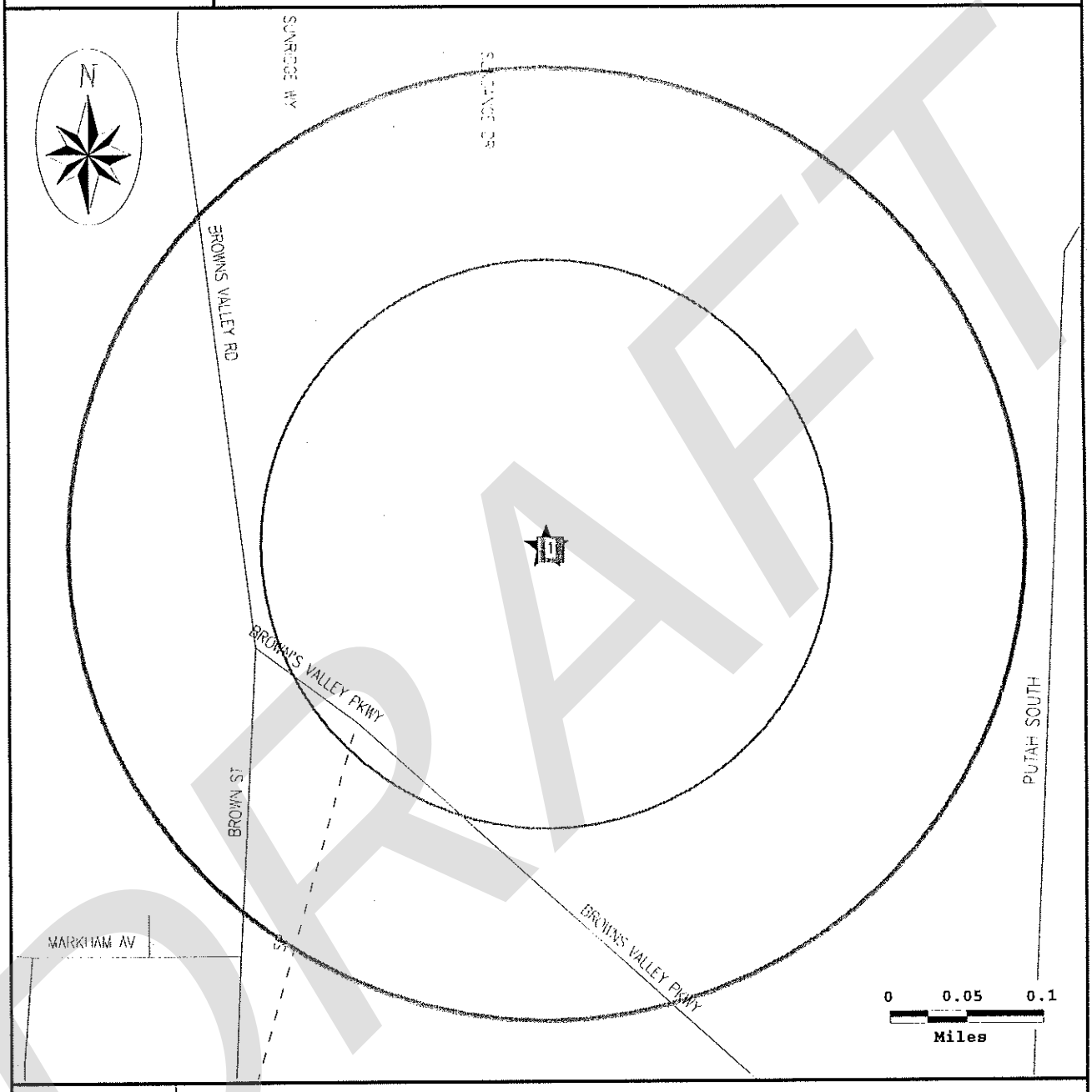
LIMITATION OF LIABILITY
Customer proceeds at its own risk in choosing to rely on VISTA services, in whole or in part, prior to proceeding with any transaction. VISTA cannot be an insurer of the accuracy of the information, errors occurring in conversion of data, or for customer's use of data. VISTA and its affiliated companies, officers, agents, employees and independent contractors cannot be held liable for accuracy, storage, delivery, loss or expense suffered by customer resulting directly or indirectly from any information provided by VISTA.

NOTES

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SITE ASSESSMENT PLUS REPORT

Map of Sites within Quarter Mile



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Subject Site	Category: / Databases Searched to:	A 1 mi.	B 1/2 mi.	C 1/4 mi.	D 1/8 mi.
★	Single Sites	◆	▩	△	○
	Multiple Sites	◆	▩	△	○
		NPL, SPL, TSD, CORRACTS	CERCLIS, SCL, LUST, SWLF	TRIS, UST	ERNS, GENERATORS

Roads
Highways
Railroads
Rivers or Water Bodies
Utilities

If additional databases are listed in the cover page of the report they are also displayed on this map. The map symbol used corresponds to the database category letter A,B,C,D.

SITE ASSESSMENT PLUS REPORT

SITE INVENTORY

MAP ID	PROPERTY AND THE ADJACENT AREA (within 1/8 mile)	VISTA ID / DISTANCE / DIRECTION	A				B										C			D	
			NPL	CORRACTS	TSD	SPL	CERCLIS	SCL	LUST	SWLF	DEED RSTR	NORTH BAY	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST	ERNS	GNRTR
1	VACAVILLE LANDFILL (OLD) BROWN VALLEY ROAD VACAVILLE, CA 95688	3863641 0.00 MI ADJACENT								X									

MAP ID	SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile)	VISTA ID / DISTANCE / DIRECTION	A				B										C			D	
			NPL	CORRACTS	TSD	SPL	CERCLIS	SCL	LUST	SWLF	DEED RSTR	NORTH BAY	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST	ERNS	GNRTR

No Records Found

MAP ID	SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile)	VISTA ID / DISTANCE / DIRECTION	A				B										C			D	
			NPL	CORRACTS	TSD	SPL	CERCLIS	SCL	LUST	SWLF	DEED RSTR	NORTH BAY	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST	ERNS	GNRTR

No Records Found

MAP ID	SITES IN THE SURROUNDING AREA (within 1/2 - 1 mile)	VISTA ID / DISTANCE / DIRECTION	A				B										C			D	
			NPL	CORRACTS	TSD	SPL	CERCLIS	SCL	LUST	SWLF	DEED RSTR	NORTH BAY	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST	ERNS	GNRTR

No Records Found

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UNMAPPED SITES	VISTA ID	A				B								C			D	
		NPL	CORRACTS	TSD	SPL	CERCLIS	SCL	LUST	SWLF	DEED RSTR	NORTH BAY	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST	ERNS	GNRTR
RIO VISTA ARMY RESERVE TRAINING AREA 27 ACRES ONE MILE SOUTH OF RIO VISTA , CA	6563328							X										
PGE COMPRESSOR STATION SERPA JUNCTI 1.5 MILES NORTH OF RIO VISTA , CA	6564209							X										

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SITE ASSESSMENT PLUS REPORT

DESCRIPTION OF DATABASES SEARCHED

A) DATABASES SEARCHED TO 1 MILE

NPL
SRC#: 3064

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for NPL was June, 1996.

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the US Dept of Health and Human Services and the US EPA in order to become an NPL site.

SPL
SRC#: 3172

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for Calsites Database: Annual Workplan Sites was July, 1996.

This database is provided by the Cal. Environmental Protection Agency, Dept. of Toxic Substances Control.

CORRACTS
SRC#: 3284

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for RCRA Corrective Action Sites List was August, 1996.

The EPA maintains this database of RCRA facilities which are undergoing "corrective action". A "corrective action order" is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.

RCRA-TSD
SRC#: 3284

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for RCRIS was August, 1996.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA TSDs are facilities which treat, store and/or dispose of hazardous waste.

B) DATABASES SEARCHED TO 1/2 MILE

CERCLIS
SRC#: 2976

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for CERCLIS was March, 1996.

The CERCLIS List contains sites which are either proposed to or on the National Priorities List(NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activiles or events at the site, financial funding information for the events, and unrestricted enforcement activities.

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TRIS
SRC#: 2587

VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for TRIS was May, 1995.

Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as SARA Title III) of 1986 requires the EPA to establish an Inventory of Toxic Chemicals emissions from certain facilities(Toxic Release Inventory System). Facilities subject to this reporting are required to complete a Toxic Chemical Release Form(Form R) for specified chemicals.

D) DATABASES SEARCHED TO 1/8 MILE

ERNS
SRC#: 3006

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for ERNS was March, 1996.

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the US Coast Guard, the National Response Center and the Department of transportation. A search of the database records for the period October 1986 through March 1996 revealed information regarding reported spills of oil or hazardous substances in the stated area.

RCRA-LgGen
SRC#: 3284

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for RCRIS was August, 1996.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Large Generators are facilities which generate at least 1000 kg./month of non-acutely hazardous waste (or 1 kg./month of acutely hazardous waste).

RCRA-SmGen
SRC#: 3284

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for RCRIS was August, 1996.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Small and Very Small generators are facilities which generate less than 1000 kg./month of non-acutely hazardous waste.

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End of Report

APPENDIX B

Photolog

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Project Site: Centennial Park Site, Vacaville, CA	Comments: Looking north. Powerpole in foreground, commercial structures in background.
Project No.: SF053-004	
Date: April 7, 1997	Photograph No.: 1

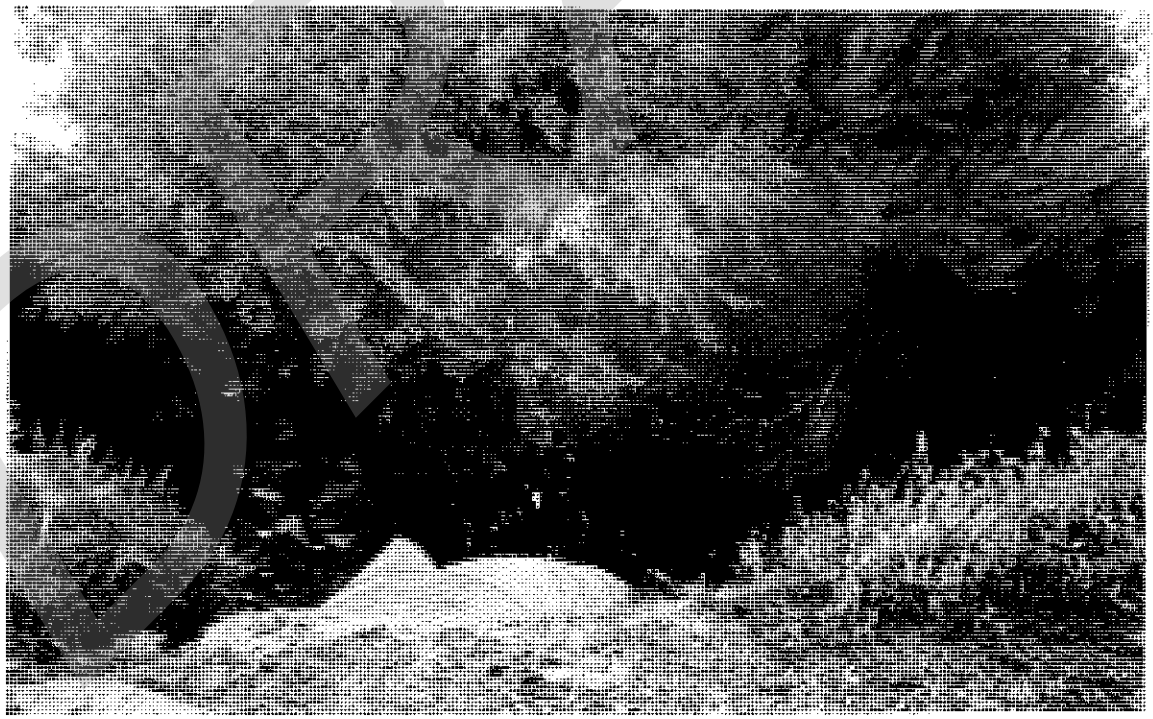


Project Site: Centennial Park Site, Vacaville, CA	Comments: Looking east at southern parcel boundary. Trees mark Horse Creek tributary location. Nut tree Airport is in the background
Project No.: SF053-004	
Date: April 7, 1997	Photograph No.: 2

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Project Site: Centennial Park Site, Vacaville, CA	Comments: Looking south. Inactive landfill and athlectic fields in background.
Project No.: SF053-004	
Date: April 7, 1997	Photograph No.: 3

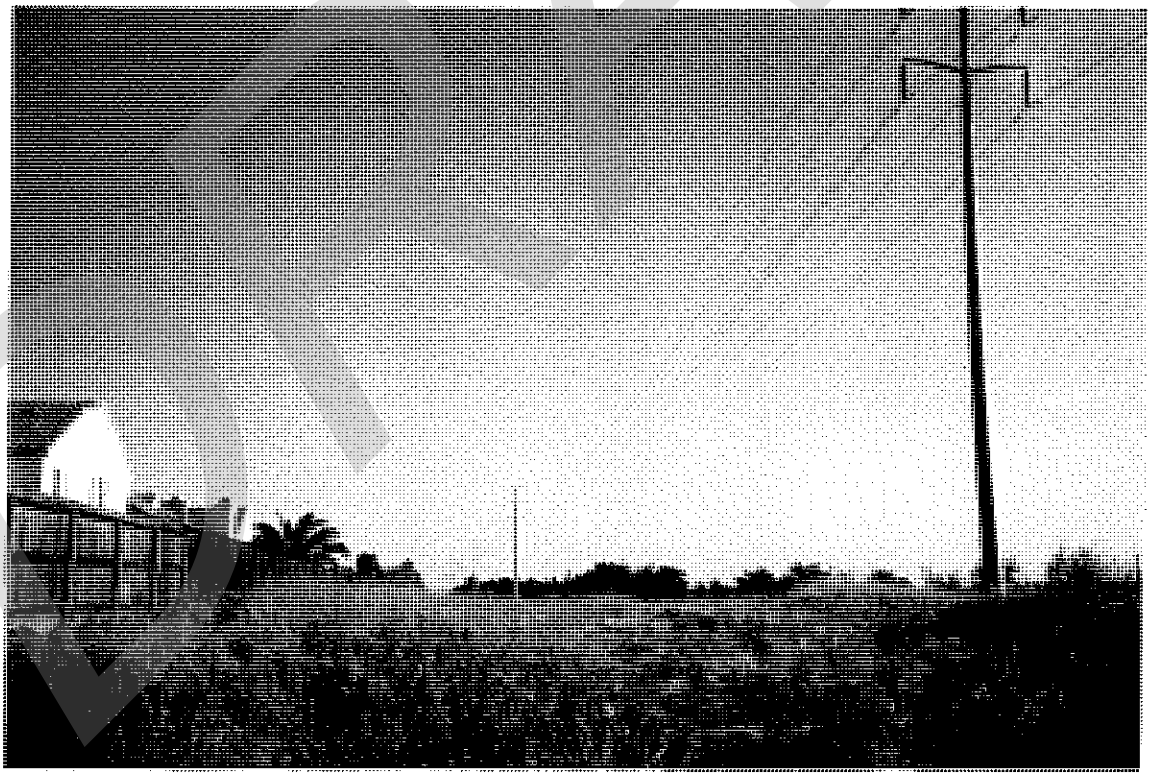


Project Site: Centennial Park Site, Vacaville, CA	Comments: Storm drain inlet to the lower Horse Creek tributary on south border of site.
Project No.: SF053-004	
Date: April 7, 1997	Photograph No.: 4

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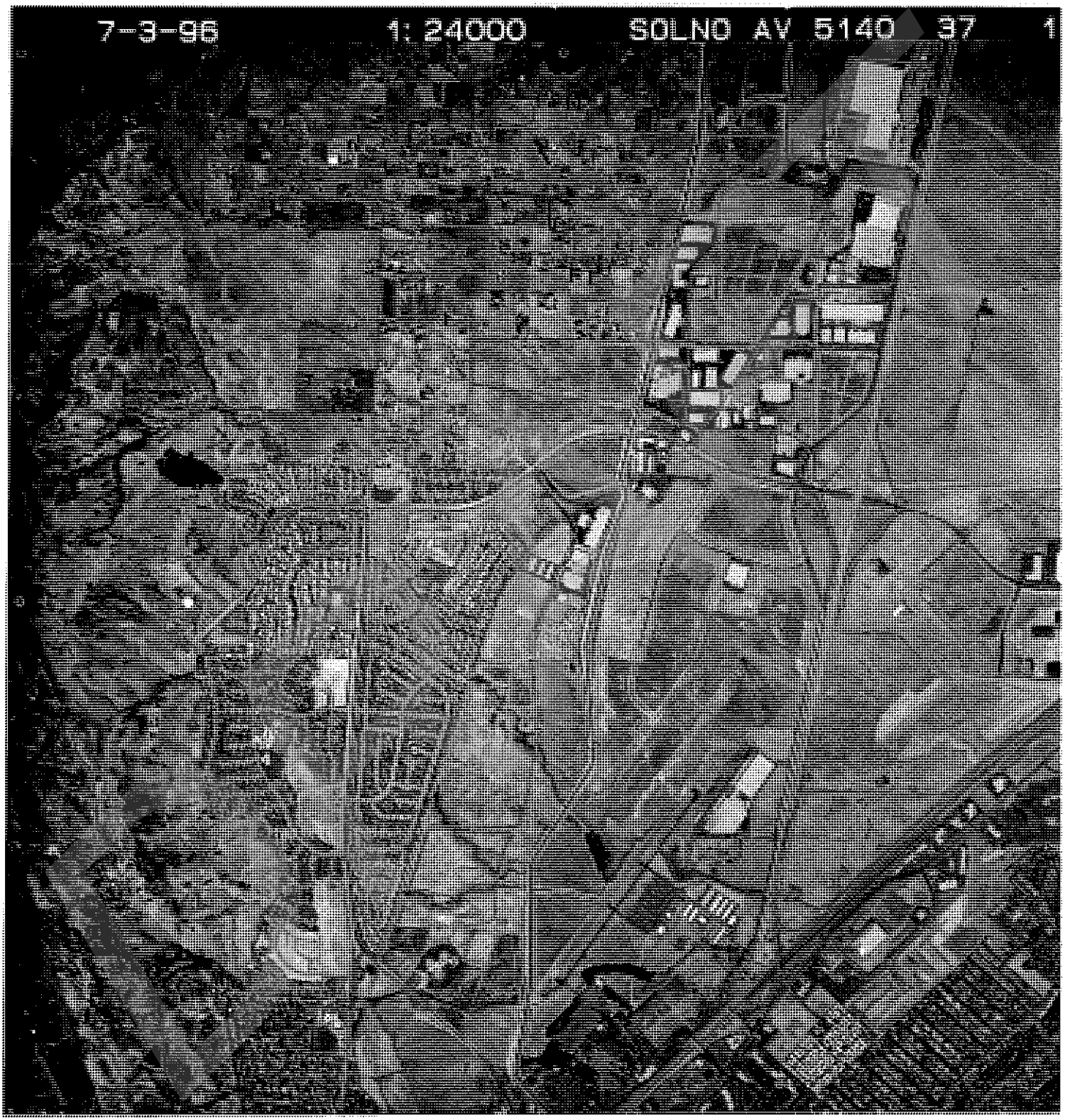


Project Site: Centennial Park Site, Vacaville, CA	Comments: Looking west. Residences in background at west boundary of parcels.
Project No.: SF053-004	
Date: April 7, 1997	Photograph No.: 5



Project Site: Centennial Park Site, Vacaville, CA	Comments: PG&E easement and SP Right-Of-Way.
Project No.: SF053-004	
Date: April 7, 1997	Photograph No.: 6

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7-3-96
1: 24000
SOLNO AV 5140
37
1

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO ATTENTION OF

DEPARTMENT OF THE ARMY PERMIT

Permittee: Kevin Smith
City of Vacaville
Office of Housing and Redevelopment
40 Eldridge Avenue, Suite 2
Vacaville, California 95688

Permit Number: 199600513

Issuing Office: U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 "J" Street
Sacramento, California 95814-2922

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

The purpose of this project is to create a mixed-use sports complex/recreation facility. The City will fill approximately 4.10 acres of jurisdictional waters and create on-site mitigation of 5.12 acres. The fill will take place at the western sewage treatment pond at the southern end of the property and at the wetland in the north east section of the property. A wetland which exists between the Putah South Canal and the sewage treatment ponds will be eliminated. A portion of the tributary which enters the property at the north will be placed in a culvert. Mitigation will take place on-site at the most western of the two sewage treatment ponds, and at the northern detention basin. Neither of these sites will be maintained.

All work is to be completed in accordance with the attached plan(s). A letter from the City of Vacaville, dated April 15, 1999, along with a map titled "Centennial Park Wetlands Mitigation and Monitoring Plan", dated March 17, 1999, are also attached.

Project Location:

Centennial Park is a 135 acre property located in an unsurveyed portion of Township 6 North, Range 1 West, M.D.B. & M., within the City of Vacaville, in Solano County, California. The park is bordered by Browns Valley Parkway to the south, the Southern Pacific Railroad right-of-way to the west, undeveloped land to the north and Putah South Canal to the east.

Permit Conditions:

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General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2002. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1) The permittee shall abide by all measures as set forth in the Wetlands Mitigation And Monitoring Plan, Centennial Park, City Of Vacaville, California, dated February 5, 1998, revised May 20, 1998, and March 17, 1999.

2) The permittee shall provide a minimum 50 foot buffer around all mitigation areas and from the top of bank of Horse Creek, to preserve the wetland and waters of the United States' functions and values.

3) For economic reasons, the applicant may phase this project, however, mitigation must take place prior to wetland impacts in each phase.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(•) Section 404 of the Clean Water Act (33 U.S.C. 1344).

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( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant.

Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to

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comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Permittee _____ Date 8-9-99

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Issued for and in behalf of Colonel Michael J. Walsh, District Engineer.

Tom Coe _____ Date 08/13/99
Chief, Central California/Nevada Section

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Transferee _____ Date _____

DRAFT

96-513

City of Vacaville
Office of Housing and Redevelopment
40 Eldridge Ave., Suites 1-5 • Vacaville, CA 95688
(707) 449-5675 • FAX (707) 449-5683

April 15, 1999

RE: Wetlands Mitigation and Monitoring Plan, Centennial Park, City of Vacaville, California

Nancy Haley
Biologist, Regulatory Project Manager
US Army Corps of Engineers
1325 J Street, 14th floor
Sacramento, CA 95814-2922

Dear Nancy,

RE: Revised Page 15 (Figure 4) and Page 8 (Table A)

Per our meeting with you and Jim on January 25, 1999, we have been working with LSA to prepare a revised Figure 4 and Table A for our Wetlands Mitigation and Monitoring Plan for Centennial Park. I have enclosed these two items for your review and approval. I believe that, with your approval of this submission, your office will be ready to issue the permit for the project.

The major changes, as we discussed, include eliminating the southeast soccer field in the old sewer treatment pond, expanding the mitigation to non-wetland areas in and around the old sewer treatment pond, and slightly expanding the mitigation area north of Horse Creek. The result of these changes reduces the overall impact to the existing wetlands and contains the mitigation in areas that do not require any recurring maintenance activities. OK

To reiterate two points from our meeting in January, it is our understanding that we can phase our mitigation efforts to stay ahead of our development impacts and that we can submit a request for amendment to the permit if a mutually acceptable off-site alternative becomes available.

Thank you very much for your informative and helpful direction throughout the permitting process. Your willingness to provide encouragement along with direct and concise answers has help us tremendously to both learn the process and arrive at the best alternative for the project. I look forward to your response to this submittal and I am available to answer any questions you may have.

DRAFT

Sincerely,

Kevin Smith
Project Coordinator
Office of Housing & Redevelopment
cc: Linda Aberbom, LSA

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Table A - Centennial Park Jurisdictional Areas Summary

Location	Existing Jurisdictional Areas	Avoided Jurisdictional Areas	Filled Jurisdictional Areas	Mitigation[1] (Created:Filled)
Southwest Seasonal Wetlands	0.30	0.27	0.03	0.00
Northeast Pine Tree Creek	0.55	0.55	--	--
Sewage Treatment Ponds	7.96	4.53	3.51	2.64
Horse Creek	0.95	0.95	0.00	0.00
Northeast Detention Basin and Tributary	0.69	0.13	0.56	2.48
Total	10.45	6.43	4.10	5.12

11.25

This table has been updated from the table that appears in the *Wetlands Mitigation and Monitoring Plan, Centennial Park, City of Vacalle, CA*, revised May 20, 1998.

[1]Locations of proposed mitigation sites are illustrated on Figure 4.

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WETLANDS MITIGATION AND MONITORING PLAN
CENTENNIAL PARK, CITY OF VACAVILLE, CALIFORNIA

February 5, 1998
Revised May 20, 1998

Prepared for:

City of Vacaville
650 Merchant Street
Vacaville, CA 95688

Prepared by:

LSA Associates, Inc.
157 Park Place
Point Richmond, California 94801
(510) 236-6810
LSA Project #COV631

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SUMMARY

This mitigation and monitoring plan for the Centennial Park project provides a comprehensive approach for the replacement of wetlands and other waters of the U.S. to be filled as a result of site development. The project has been designed to avoid impacts to wetland areas to the extent practicable. Wetland impacts will result from the filling of seasonal wetlands and drainages on the Centennial Park property. The proposed project involves the fill of a total of 7.20 acres of jurisdictional wetlands and other waters of the United States on the Centennial Park project site.

The Negative Declaration, Environmental Assessment prepared for the City of Vacaville Community Development Department dated February 14, 1997, states that a Section 404 Individual Permit pursuant to the Clean Water Act be acquired to approve fill activities at the Centennial Park project site. Approval and implementation of this plan will fulfill the mitigation requirements for that activity regulated by the U.S. Army Corps of Engineers.

The plan proposes to create at least 9.00 acres of new wetlands to compensate for the loss of 7.20 acres of jurisdictional areas, representing a compensation ratio of approximately 1.25:1 (new to filled). Mitigation will consist of: (1) avoidance of the significant wetland area on the site; and (2) creation of seasonally-inundated wetlands. Suitable locations for wetland creation were selected based on site-specific soil conditions and hydrologic feasibility. The overall objective is to ensure that there will be no net loss in wetland area or value.

Two types of replacement habitat will be created:

- **Seasonal Wetlands:** Approximately 8.58 acres of seasonal wetlands will be created to replace approximately 6.54 acres of existing seasonal wetlands that will be filled. In addition, 1.77 acres of seasonal wetlands will be avoided and preserved on the project site.

- **Widened Drainage:** A total of approximately 0.42 acre of wetlands will be created in a widened portion of Horse Creek to offset approximately 0.66 acre of drainage impacts to Horse Creek and the adjacent tributary. A total of 1.48 acres of drainages will be avoided and preserved on the project site.

The mitigation sites will be monitored and managed for a minimum of five years under the direction of a restoration ecologist to assure that the new wetlands are successfully created. The success of the wetland replacement areas will be monitored as part of this plan and will be evaluated based on site-specific performance standards.

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PROJECT DESCRIPTION

RESPONSIBLE PARTIES

Applicant

City of Vacaville
650 Merchant Street
Vacaville, CA 95688
Contact: Wendy Thomas
(707) 449-5660

The term City used herein shall mean City of Vacaville and those various successors and assigns to whom the City may from time to time contractually assign all or a portion of its rights and responsibilities under this application.

Preparer

LSA Associates, Inc.
157 Park Place
Point Richmond, CA 94801-3922
Contacts: Rob Schonholtz
Linda Aberbom
(510) 236-6810

Party Financially Responsible for Attainment of Success Criteria

The City is financially responsible for the attainment of the performance standard detailed in this mitigation plan.

Present Owner of Mitigation Site

The City is the present legal owner of the mitigation site proposed in this plan.

Expected Long-term Owner of Mitigation Site

The City is the present legal owner of the mitigation site proposed in this mitigation plan.

Party Responsible for Long-term Maintenance of Mitigation Site

Long-term maintenance of the mitigation areas will begin when the U.S. Army Corps of Engineers (Corps) confirms the completion of the mitigation

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program. Long-term maintenance of the mitigation areas will be accomplished through a public or private organization, with the assistance of qualified consultants. This management entity will be established to ensure its ability to carry out the financial and technical requirements to accomplish the long-term management objectives. Selection of the management entity will be reported to the Corps. Maintenance such as trash removal, large invasive weed eradication, and vandal damage will be performed on a regular basis. Correcting any major problems that may occur, such as erosion damage will be repaired on an as-needed basis.

LOCATION OF PROJECT

Centennial Park is located within the City of Vacaville in central Solano County. The approximately 135 acre project site occurs at approximately 120 feet elevation in Township 6 N., Range 1 W., on the Allendale and Elmira 7.5 minute U.S.G.S. quadrangles. The site is generally bordered to the south by Browns Valley Parkway, to the west by Southern Pacific Railroad right-of-way, to the north by undeveloped land and to the east by Putah South Canal (see Figures 1 and 2). A small portion of City owned property (the proposed Southwest Seasonal Wetland mitigation site) is located immediately to the south of Browns Valley Parkway.

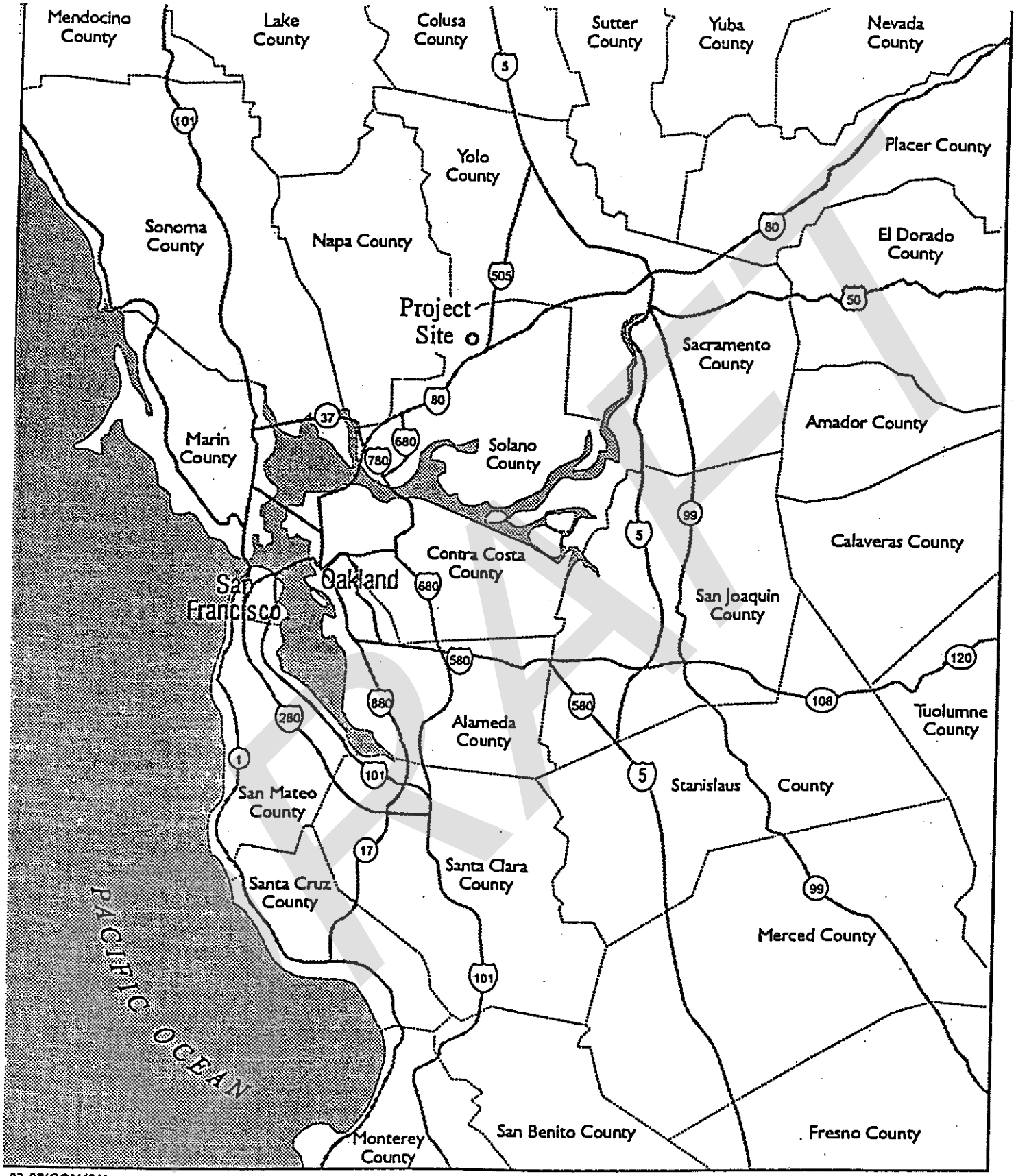
BRIEF SUMMARY OF OVERALL PROJECT

Centennial Park is a mixed-use sports complex/recreation facility, portions of which have been previously approved and are developed or currently under construction. The City is now preparing to enter into the Phase II of park development which involves the construction of outdoor natural and synthetic turf ball fields, spine road and Homefield Building, picnic areas, playground equipment, walking trails, parking lots, and other associated improvements. Phase III, the final phase of park development, involves the construction of a 9-hole golf course which is currently being designed.

Phase II and Phase III of development (soccer fields, parking lots, the golf course and associated improvements) will require filling of approximately 6.54 acres of existing seasonal wetlands and approximately 0.66 acre of drainages. The construction of compensatory wetlands will begin before or concurrent with the commencement of site development, regardless of project phasing.

This report presents a plan for the mitigation for the fill of 7.20 acres (Phase II and III) of jurisdictional wetlands and other waters of the United States on the Centennial Park project site in central Solano County, California.

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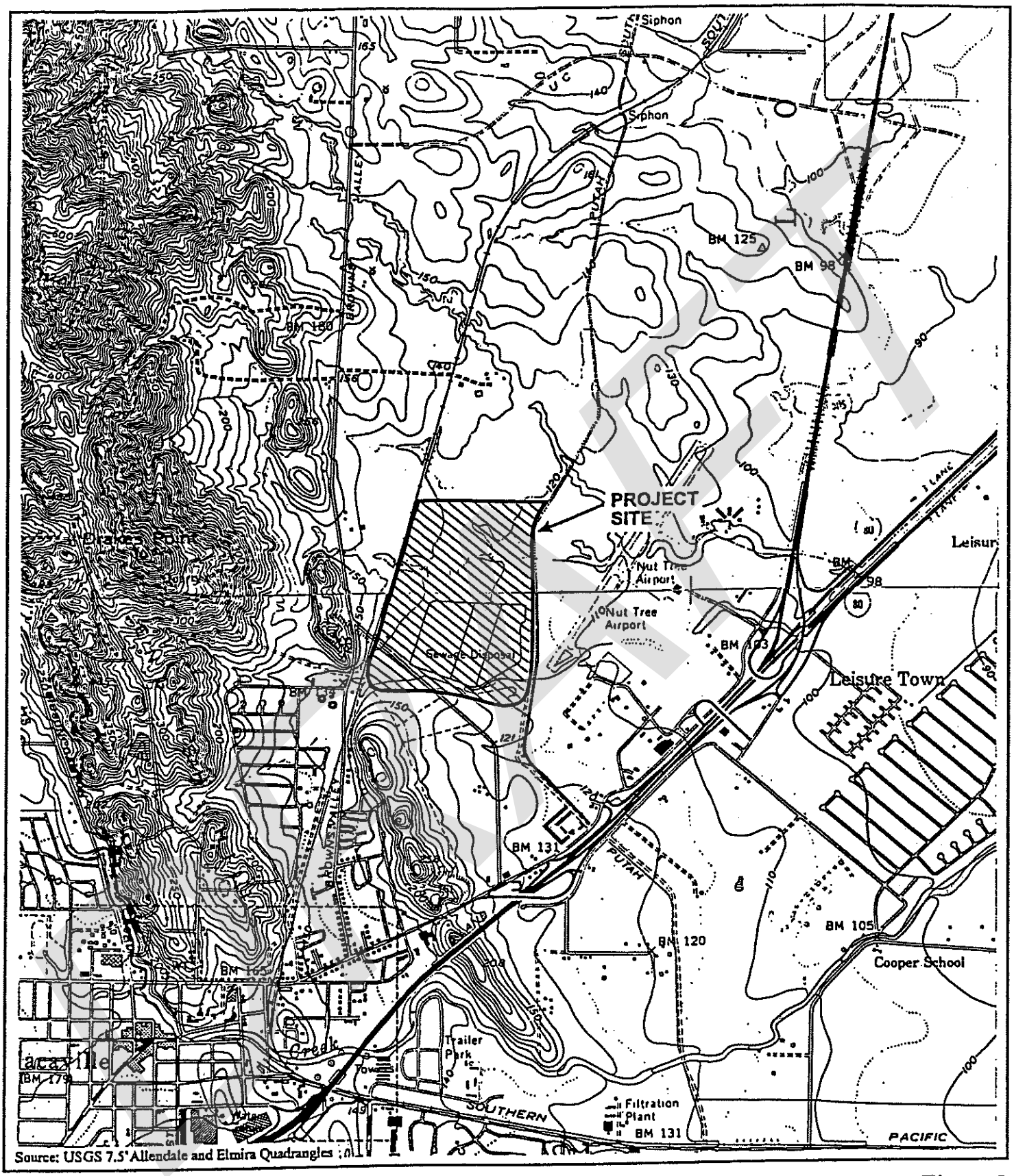
Figure 1

LSA

Scale in miles

0 20

Regional Location



Source: USGS 7.5' Allendale and Elmira Quadrangles

12-03-97(COV631)

Figure 2

N

LSA

Scale in feet

0 2000

Project Location

JURISDICTIONAL AREAS TO BE FILLED BY HABITAT TYPE

Three separate jurisdictional delineations have been conducted on the Centennial Park property in recent years. Sugnet and Associates and Jones and Stokes Associates, Inc. performed jurisdictional delineations on the Centennial Park property in 1992 and 1996, respectively. These delineations collectively identified a total of 10.11 acres of wetlands and other waters of the United States. Wetlands consist of 8.58 acres and waters consist of 1.53 acres of intermittent drainages. This delineation was verified by the Corps on January 31, 1997. A subsequent delineation of jurisdictional areas in the portion of the property located south of Browns Valley Parkway (proposed Southwest Seasonal Wetland mitigation area) was conducted by LSA Associates, Inc. and verified by the Corps on July 24, 1997. This delineation was conducted to confirm the reconnaissance level findings of Jones and Stokes in that portion of the site. Although no wetlands were identified, a total of 0.30 acre of drainages subject to Corps jurisdiction were identified. The jurisdictional delineations conducted on the Centennial Park site have identified a total of 10.45 acres of wetlands and other waters of the United States.

Further development at Centennial Park as proposed would result in the elimination of approximately 7.20 acres of wetlands and other waters of the United States (see Figure 3). This fill total includes impacts to both seasonal wetlands and drainages distributed as follows:

Seasonal Wetlands	6.54
Drainage	0.66
Total	7.20

This loss will be mitigated by the creation of at least 9.00 acres of jurisdictional wetlands and other waters of the United States. A summary of wetland impacts and proposed compensation is shown in Table A.

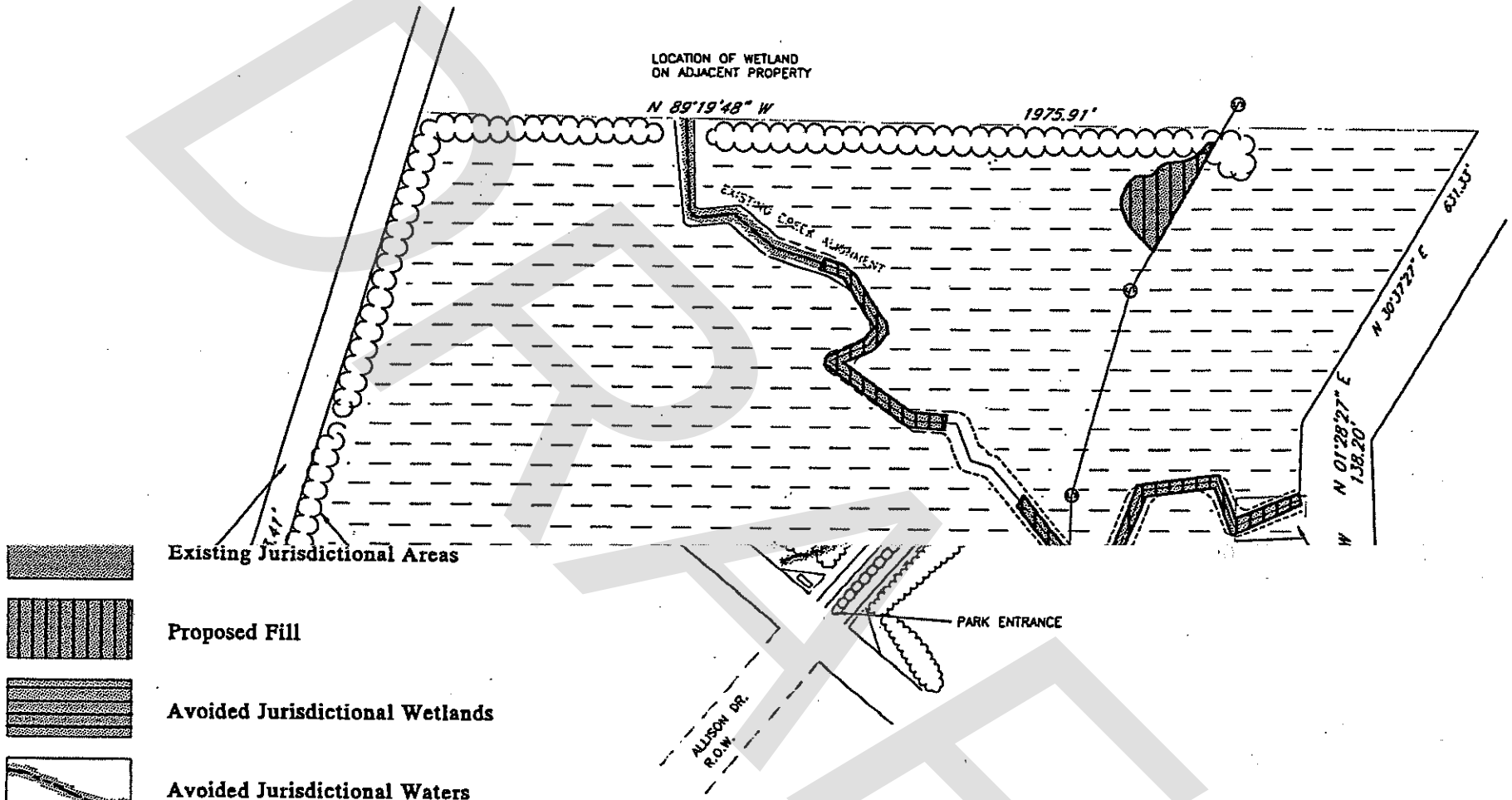
TYPES, FUNCTIONS, AND VALUES OF THE JURISDICTIONAL AREAS TO BE DIRECTLY AND INDIRECTLY IMPACTED

Type

Seasonal Wetlands

Seasonal wetlands identified on the project site were located in former sewage treatment ponds that have since been abandoned and the northeast portion of the property. The abandoned treatment ponds and northeast seasonal wetland are functioning as seasonal wetlands and contain shallow water during the winter rainy season. The seasonal wetlands are dominated by a mix of hydrophytic species such as swamp timothy (*Crypsis shoenoides*), Italian ryegrass (*Lolium multiflorum*), and lambsquarters (*Chenopodium album*).

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Source: City of Vacaville

12-23-97(COV631)

N

LSA

Scale in feet

0 300

Figure 3

Centennial Park
Existing Jurisdictional Areas
and Proposed Fill

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Table A - Centennial Park Jurisdictional Areas Summary

Location	Existing Jurisdictional Areas	Avoided Jurisdictional Areas	Filled Jurisdictional Areas	Mitigation[1] (Created:Filled)
Southwest Seasonal Wetlands	0.30	0.27	0.03	0.00
Northeast Pine Tree Creek	0.55	0.55	--	--
Sewage Treatment Ponds	7.96	4.53	3.51	2.64
Horse Creek	0.95	0.95	0.00	0.00
Northeast Detention Basin and Tributary	0.69	0.13	0.56	2.48
Total	10.45	6.43	4.10	5.12

This table has been updated from the table that appears in the *Wetlands Mitigation and Monitoring Plan, Centennial Park, City of Vacalle, CA*, revised May 20, 1998.

[1]Locations of proposed mitigation sites are illustrated on Figure 4.

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Drainages

The site contains several drainages that are part of a tributary system. Horse Creek in the northern portion of the park and Pine Tree Creek in the southern portion of the park are the two predominant drainages on the site with a shallow tributary located in the northern section of the property. The upstream end of Pine Tree Creek has been channelized for flood control purposes. The creek in this area has earthen banks and supports a limited amount of emergent wetland vegetation. Scattered willow trees (*Salix* sp.) form a discontinuous corridor adjacent to the creek in this area. Horse Creek drainage is deeply incised and supports scattered willows, cattails and other emergent vegetation. The northern tributary is a shallow swale that supports herbaceous vegetation.

This jurisdictional type is defined by the limit of the Ordinary High Water Mark.

Functions, Values, and Baseline Information

The seasonal wetlands are of low value and are typically inundated or saturated during the winter and early spring, but are usually dry by April or May. Seasonal rainfall is the principal source of water for these wetlands, with minor inputs from local runoff. Subsurface clay and/or hard pans act as aquitards which prevent the surface water from infiltrating into the soil.

Drainages on the site consist of intermittent drainages. Two of the three drainages have defined beds and banks. These drainages are usually incised within upland grasslands.

Habitat

Several reconnaissance level and focused biological surveys on the Centennial Park property have been conducted in recent years. The site is in the potential range and contains suitable habitat for several special-status plant and animal species.

Vegetation

Much of the site is generally dominated by an annual grassland plant community. Non-native grassland is a common plant community in California. This community is characterized by non-native annual grasses in association with other native and exotic annual and herbaceous perennial species. The plant community is dominated by brome grasses (*Bromus hordeaceus* and *B. diandrus*), wild oats (*Avena fatua*), and Italian ryegrass (*Lolium multiflorum*). Scattered willow trees (*Salix* sp.) form a discontinuous corridor along Pine Tree Creek in the portion of the project south of Browns Valley Parkway.

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Other trees on the project site consist of eucalyptus (*Eucalyptus* sp.) and recently planted native and non-native ornamental trees.

Wildlife

Wildlife inhabiting the study area are typical of grassland habitat in the Inner Coast Range. The number of wildlife species present is relatively low because the project site has been historically disturbed by agricultural and fire suppression discing and is dominated by a single vegetation type composed of non-native grassland. Nesting habitat for birds is limited due to the limited number of suitable trees on the site.

Pine Tree Creek, Horse Creek, the northeast tributary, and the seasonal wetlands on the project site provide breeding habitat for amphibians. Amphibian species observed on the project site, include Pacific treefrogs (*Pseudacris regilla*), and bullfrogs (*Rana catesbiana*). Bullfrogs require permanent water sources which can be found in Pine Tree Creek.

Several ground nesting bird species typical of grasslands have been observed on the site. These include western meadowlarks (*Sturnella neglecta*), savannah sparrows (*Passerculus sandwichensis*), and California horned larks (*Eremophila alpestris*). Mixed flocks of Brewer's blackbird (*Euphagus cyanocephalus*), and red-winged blackbird (*Agelaius phoeniceus*) forage in grasslands on-site.

Resident, migrant, and overwintering raptors which may potentially be present include Swainson's hawk (*Buteo swainsoni*), northern harrier (*Circus cyaneus*), and burrowing owl (*Speotyto cunicularia*).

Known or Probable Fish, Shellfish, and Aquatic Invertebrate Use

Due to the intermittent nature of the drainages on the site, it is unlikely that fish, shellfish, or aquatic invertebrates significantly use or inhabit the water-courses. Similarly, the seasonal nature of the wetland areas on site greatly limits their use by fish or shellfish. No fish or shellfish were observed on the site.

When the seasonal wetlands hold water during the spring, they provide habitat for some types of aquatic invertebrates. Typical invertebrate species associated with seasonal wetlands (*e.g., Daphinia* spp., cladocerans, chironomids, etc.) are expected to occur on the site.

Several of the seasonal wetlands on the site have been determined to be potential habitat for fairy shrimp. Therefore, a habitat assessment was performed by Jones and Stokes in 1996 and a reconnaissance level survey was performed by LSA, February, 1997. These activities revealed no evidence of

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fairy shrimp within the seasonal wetlands. The USFWS has concurred that no additional work related to threatened or endangered species is necessary.

Recreational Use/Public Access

Centennial Park will be a public sports complex facility serving residents of the City of Vacaville and surrounding communities. In addition to the sports fields and courts, approximately 2.5 miles of walking trails have been incorporated into the park design. Public access to the wetland mitigation sites will be restricted; however, these sites will provide opportunities for wildlife viewing and other passive recreation.

Streams and Channels

The Centennial Park property contains several drainage courses which generally cross the site in a west to east direction. Pine Tree Creek is located in the southern portion of the site. This drainage conveys flows under Browns Valley Parkway in an easterly direction. Horse Creek meanders across the central portion of the site where it nearly intersects another tributary drainage crossing the northeast corner of the property. The site also contains a relatively small naturally-occurring seasonal swale in the northern portion of the site.

Soils

The USDA Soil Conservation Service (SCS) has mapped four soil series in the project area. The following descriptions were based, in part, on the *Soil Survey of Solano County, California (USDA Soil Conservation Service, 1977).*

Much of the eastern portion of the site is composed of Clear Lake clay. This soil type is also present along Pine Tree Creek in the southwestern portion of the site. This soil type is typical of other areas in the region at similar elevations. Clear Lake clay has a high clay content throughout the soil profile, which retards deep percolation and causes water to pond in topographic depressions. Clear Lake clay can have hydric inclusions of Omni silty clay if the water table is within 1½ feet from the surface.

Capay silty clay loam is present in a relatively narrow swath through the northeastern portion of the property along Horse Creek and the other drainage in the vicinity. This soil type is typically consists of nearly level soils that are moderately well drained. These soils formed in alluvium from sedimentary rocks and are typically found on basin rims. Permeability is generally slow in this soil type.

Rincon clay loam occurs in much of the western portion of the site. This soil type has developed in alluvium derived from sedimentary rocks. Since the

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subsoils are slowly permeable and clay content is somewhat high in the surface horizon, Rincon clay loam typically encourages shallow perched water conditions.

Corning gravely loam is present in the central and southern portions of the project site. This soil type contains gravel and cobbles, though it can contain a high clay content in the surface horizon which results in perched water conditions.

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GOAL OF MITIGATION

The overall goal of mitigation is to ensure that no net loss of jurisdictional areas or functional value will occur due to further development of the Centennial Park project. The specific objectives to achieve this goal include: 1) avoidance and protection, to the extent feasible, of portions of the seasonal wetlands present in the former sewage treatment ponds, and portions of Horse Creek; and 2) the replacement of jurisdictional areas which are impacted by project development with created wetlands and waters that are expected to provide hydrologic and vegetative functions and values comparable to or better than the filled areas.

AVOIDANCE AND PROTECTION

The Centennial Park project has been designed to avoid fill, to the extent practical, of the site's existing wetlands. Overall, a total of approximately 3.25 acres of jurisdictional areas on the site will be avoided and protected. This total represents approximately 31% of the jurisdictional areas on the project site.

Within the 3.25 acres of avoided and protected jurisdictional areas, approximately 200 feet of the northern tributary will be protected to maintain the hydrologic regime of the wetland that exists on the adjacent property to the north.

Existing wetlands that are not proposed to be filled will be protected with buffer zones to increase their value as natural areas.

COMPENSATION

Implementation of this mitigation plan will include the creation of at least 9.00 acres of compensatory wetlands to mitigate for the loss of 7.20 acres as a result of project development. These figures reflect an overall replacement ratio of approximately 1.25:1 (new to filled). Compensation for impacts to seasonal wetlands will occur through the creation of 8.58 acres of seasonal wetland habitat in the Southwest Seasonal Wetland, Sewage Treatment Ponds, and Northeast Detention Basin. At least 0.42 acre of wetland habitat will be created along a widened portion of Horse Creek to partially compensate for impacts to drainages on the project site. The seed bearing portion of topsoil from impacted areas with hydrophytic plants will be utilized to vegetate the created wetlands. The newly created wetlands will be larger than the impacted wetlands, thereby ensuring that the habitat value is adequately replaced.

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TYPES OF HABITAT TO BE CREATED

Seasonal wetlands will be constructed within two storm water detention basins to be constructed for the project (Northeast Detention Basin and Southwest Seasonal Wetland) and adjacent to avoided seasonal wetlands within the sewage treatment ponds (see Figure 4 and the attached full size map). At least 8.58 acres of seasonal wetland habitat will be established to compensate for impacts to 6.54 acres of this habitat type.

Portions of the fill of existing water courses on the project site will be mitigated by the widening the western side of Horse Creek in the central portion of the project. Approximately 0.42 acre of stream habitat will be created to partially offset drainage impacts on the site. The location of the widened channel is shown on Figure 4 and the attached full sized map. The remainder of drainage impacts (0.24 acre) will be offset by the creation of seasonal wetland habitat in the Northeast Detention Basin.

FUNCTIONS AND VALUES OF HABITAT TO BE CREATED

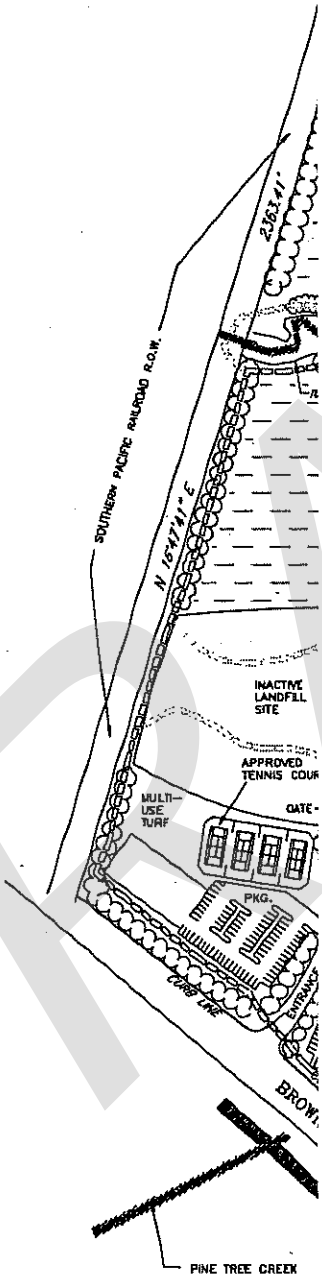
The replacement seasonal wetlands will provide flood storage functions and will also provide wildlife habitat during the rainy season. The wildlife habitat values of the replacement areas are expected to be equal to or greater than the seasonal wetlands to be filled.

EVALUATION OF TEMPORAL LOSSES

Construction of all compensatory wetlands will begin concurrent with (in the same construction season) the start of the Phase II of project construction on the Centennial Park project site. Initial construction efforts will include the soccer fields, parking lots, and associated infrastructure on the site. Creation of replacement wetlands will be coordinated with this construction. It is expected that within in two to three years, the original habitat values will be achieved.

A small portion of the jurisdictional areas will be filled when Phase III is developed in the future. The temporal losses for these wetlands will be insignificant since compensatory wetlands will have been previously created concurrent with the initial construction efforts. Because the compensatory wetlands will be constructed prior to, or concurrent with each phase of site development, future changes in phasing will not affect the implementation of the mitigation.

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Centennial Park
Wetlands Mitigation and Monitoring Plan

- Existing Jurisdictional Areas
- Proposed Fill
- Avoided Jurisdictional Wetlands
- Avoided Jurisdictional Waters
- A — Proposed Mitigation Sites
  - A Southwest Seasonal Wetland
  - B Sewage Treatment Ponds
  - C Northeast Detention Basin
- Proposed Golf Course

Source: City of Vacaville

LSA

Scale in feet
0 200 400

N

03-17-99(COV930Wetlands2)

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ESTIMATED COST

The cost for the construction of the replacement seasonal wetlands and drainage will be incorporated into the overall grading and excavation costs for this project. The replacement seasonal wetlands and drainage will be constructed as part of the overall flood control improvements for the site. The estimated cost for the monitoring and maintenance of the wetland mitigation areas until the performance criteria are satisfied is approximately $80,000.

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PROPOSED MITIGATION SITES

LOCATION AND SIZE OF MITIGATION AREAS

The mitigation will take place at the development site in Centennial Park in Vacaville. The replacement seasonal wetlands will be created in the Northeast Detention Basin, Southwest Seasonal Wetland, and in the upland portions of the former Sewage Treatment Ponds. The drainage widening will occur along the central portion of Horse Creek (see Figure 4).

Seasonal Wetlands

At least 8.58 acres of replacement seasonal wetlands will be created within the proposed Northeast Detention Basin, Southwest Seasonal Wetland, and the former Sewage Treatment Ponds. Approximately 4.32 acres will be created in the Southwest Seasonal Wetland, 2.10 in the Northeast Detention Basin, and 2.16 acres in the former Sewage Treatment Ponds. New seasonal wetlands will be constructed to emulate existing on-site seasonal wetlands with equal or better functional values.

Drainages

At least 0.42 acre of widened channel will be constructed along the central portion of Horse Creek to expand the existing channel conditions. This channel widening will be designed to offset the impacts to Horse Creek. Impacts to the other drainages which total 0.24 acre, will be mitigated by the creation of 0.24 acre of seasonal wetlands in the approximately 2.10 acre Northeastern Detention Basin.

OWNERSHIP STATUS

The City and Redevelopment Agency are the present legal owners of the mitigation sites proposed in this mitigation plan.

EXISTING FUNCTIONS AND VALUES OF MITIGATION AREAS

The Northeast Detention Basin and Southwest Seasonal Wetland mitigation areas are both dominated by annual grassland vegetation. This plant community is characterized by non-native annual grasses in association with other native and exotic annual and herbaceous perennial species. The Sewage Treatment Pond mitigation area is characterized by an annual grassland plant community similar in composition to that found in the Northeast Detention Basin and Southwest Seasonal Wetland mitigation areas. The wildlife habitat of these upland grassland areas is relatively limited due to the predominance

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of non-native species. The overall value of each of these areas will increase when the mitigation sites are established.

PRESENT AND PROPOSED USES OF MITIGATION AREAS

Presently, the mitigation areas are owned by the City and are not directly used by the public. The replacement seasonal wetlands in the new detention basin will assist with the storm water management plan for the property. Each of the mitigation areas to the north of Browns Valley Parkway will provide natural open space and offer wildlife viewing opportunities and other forms of passive recreation.

A driving range will be constructed adjacent to the Northeast Detention Basin. The driving range is expected assist the detention basin with storing water from a 100-year storm event.

JURISDICTIONAL DELINEATION

Mitigation will take place on the Centennial Park site where wetland delineations were performed and verified by the Corps. As discussed previously, three jurisdictional delineations of the project site have been conducted in recent years. The results of these delineations found that the total jurisdictional area on the Centennial Park property equals 10.45 acres.

PRESENT AND PROPOSED USES OF ALL ADJACENT AREAS

The present land uses surrounding the project site include vacant land within the Golden Hills Industrial Park to the north, Putah South Canal and Nut Tree Airport to the east, vacant agricultural land to the south, and abandoned Southern Pacific Railroad right-of-way and single family residential development and agricultural land to the west. Following complete buildout on the site, the mitigation areas will generally be buffered by setback and native and non-native landscape areas.

ZONING

The 135-acre property is zoned by the City for the following uses: public facility and open space.

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IMPLEMENTATION PLAN

RATIONALE FOR EXPECTING IMPLEMENTATION SUCCESS

Seasonal Wetlands

The seasonal wetlands will be constructed at the same elevations as the existing seasonal wetlands. The compensatory basins will be graded flat, similar to the existing seasonal wetland to be filled, compacted as necessary to retain water and inoculated with wetland soils collected on-site as a site specific seed source.

Rainfall in this watershed varies between 20- and 25-inches per year. To inundate the seasonal wetlands with 6-inches of water, a rainfall event of four to six inches is required. Once the area is temporarily flooded, the resulting pond should remain flooded for at least 30-45 days. This hydrologic condition should provide an adequate source of water to maintain the created seasonal wetlands. This condition is expected to occur between four and six times per year. Some of these times will overlap.

The compacted wetland basins overlain with wetland soils, should retain sufficient water to create the hydrologic conditions required to create seasonal wetlands. However, after excavation and compaction, the soils will be tested for permeability. Recommendations for liner installation will be made from the results of those tests.

Input into the sewage treatment pond seasonal wetlands is primarily from direct precipitation and local runoff from the parking lots, surrounding ballfields, and associated structures. Based on the extent of existing wetlands currently found in the Sewage Treatment Pond mitigation area and the characteristics of the underlying soils, it is anticipated that the current hydrologic input will be sufficient to support additional created seasonal wetlands.

Drainages

The Horse Creek widening will be excavated to the elevation of the existing drainage. The drainage widening will occur in an area of the creek, at an elevation that will be influenced and supported by natural flows in the channel. The site will be subject to the natural processes of scour and deposition which will contribute to the overall diversity of the mitigation site.

RESPONSIBLE PARTIES

The City will be responsible for implementing this mitigation plan.

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SCHEDULE

Construction of compensatory wetlands will begin concurrent with (in the same construction season) the start of the next phase of project construction on the Centennial Park site. Initial construction efforts will include the construction of soccer fields, parking lots, and associated infrastructure on the site. Creation of replacement wetlands will be coordinated with this phase of construction. If the construction schedule for the mitigation areas deviates from the above schedule, the Corps will be notified. Maintenance and monitoring of the replacement wetlands and drainages will continue beyond this time, as described below.

Excavation will take place in the summer and early fall. Erosion control seeding will take place in the fall after wetland construction.

SITE PREPARATION

At least 9.00 acres of seasonal wetlands and widened drainage will be constructed in the Northeast Detention Basin, Southwest Seasonal Wetland, former Sewage Treatment Ponds and Horse Creek. The created seasonal wetlands within the detention basin will be excavated to a depth to contain a 100-year storm event with a 1-foot free board encircling the wetlands. The seasonal wetland created adjacent to the Sewage Treatment Ponds will be excavated to the depth of the existing wetlands. The slopes of the created wetlands and waters will be 4:1. Figures 5, 6, 7 and 8 shows conceptual cross-sections of the created wetlands and waters at the four mitigation sites.

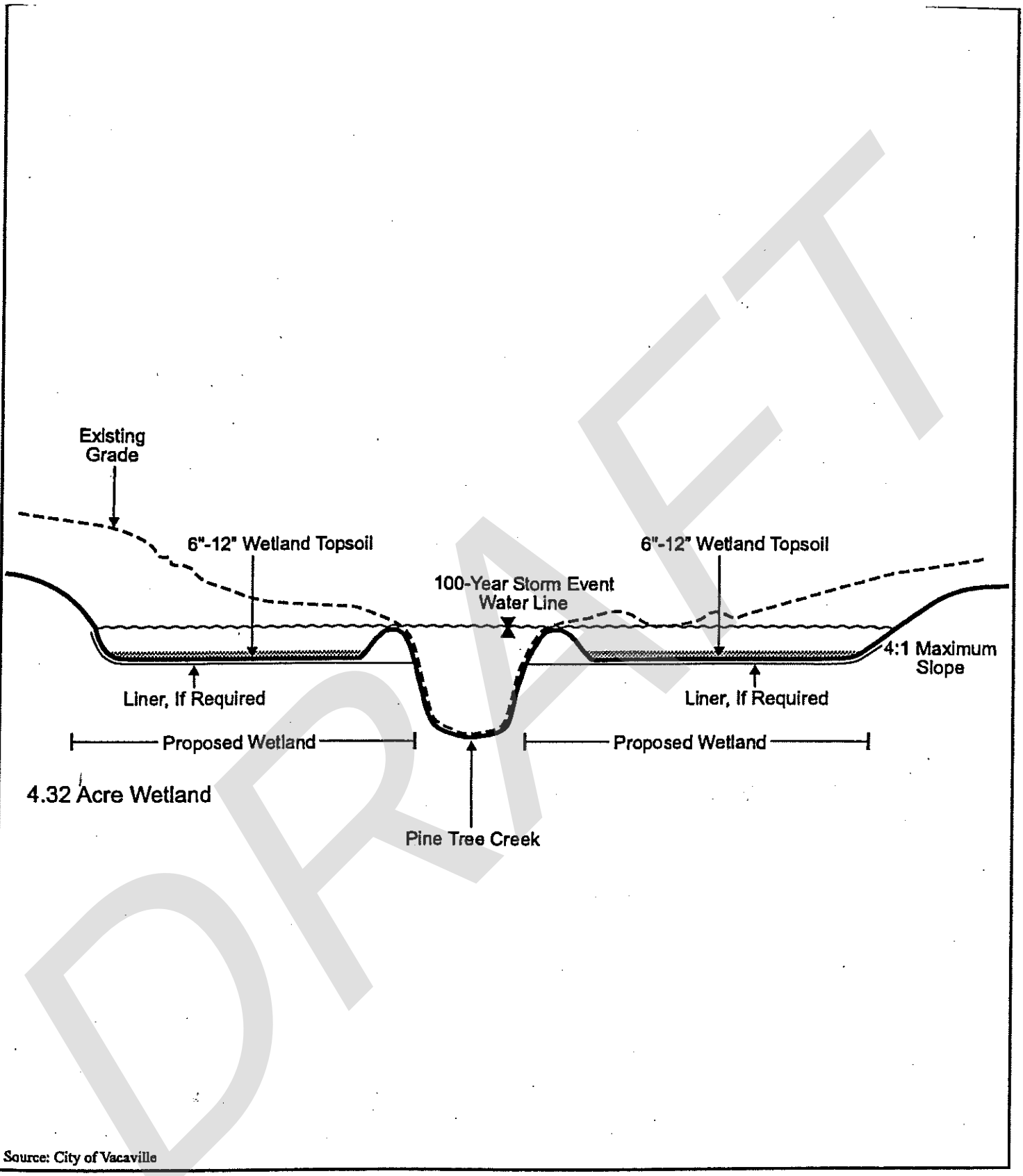
Grading activities will consist of stockpiling existing wetland soils that are removed from the jurisdictional areas proposed for fill, and reapplying in the new wetlands and waters. The topsoil stockpiles will be protected with silt fencing until they are utilized. Care will be taken to ensure that the stockpiled soil is protected from climatic extremes. Following excavation of the new wetlands, the basins will be laser-leveled (equipment other than a lazar-level may be used only if the same precise flat surface will be achieved), compacted and tested for soil permeability. Results of the permeability tests will determine if the basin will need to be lined with local clay-rich soil to pond water. A 6 to 12-inch layer of salvaged topsoil will be placed within created wetlands to establish the appropriate medium for plant growth.

Wetland Protection Specifications

The following strategies will be implemented to protect the existing wetlands prior to the commencement of grading and/or construction activities adjacent to all existing wetlands to be preserved:

- A qualified biologist will clearly stake the boundaries of each wetland area to be preserved (according to this mitigation plan) prior to the

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Source: City of Vacaville

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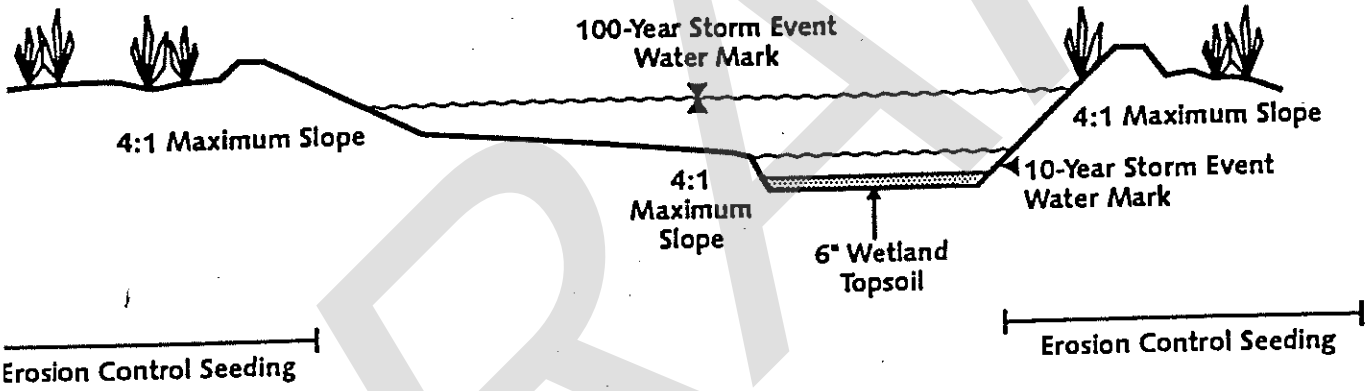
Figure 5

LSA

Not to scale

Mitigation Site A
Southwest Seasonal Wetland Conceptual Cross-section

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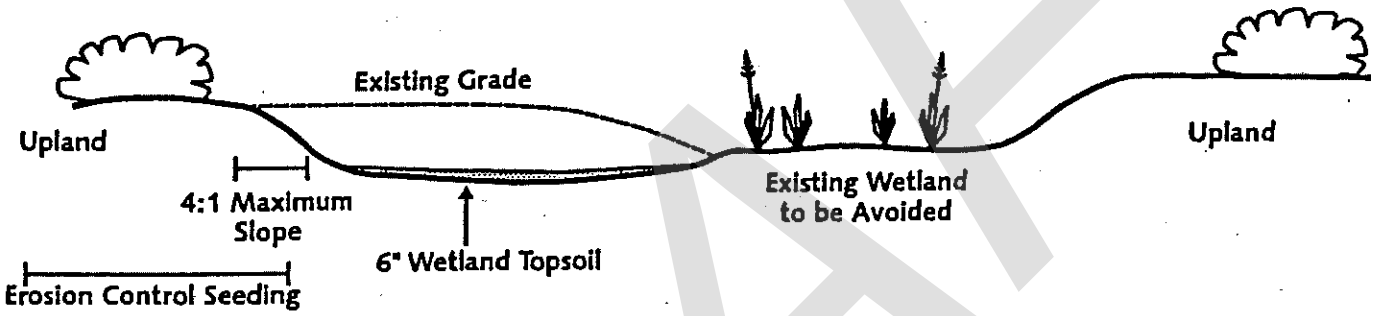
ource: City of Vacaville
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Figure 6

LSA Not to scale

Mitigation Site D
Northeast Detention Basin Conceptual Cross-section

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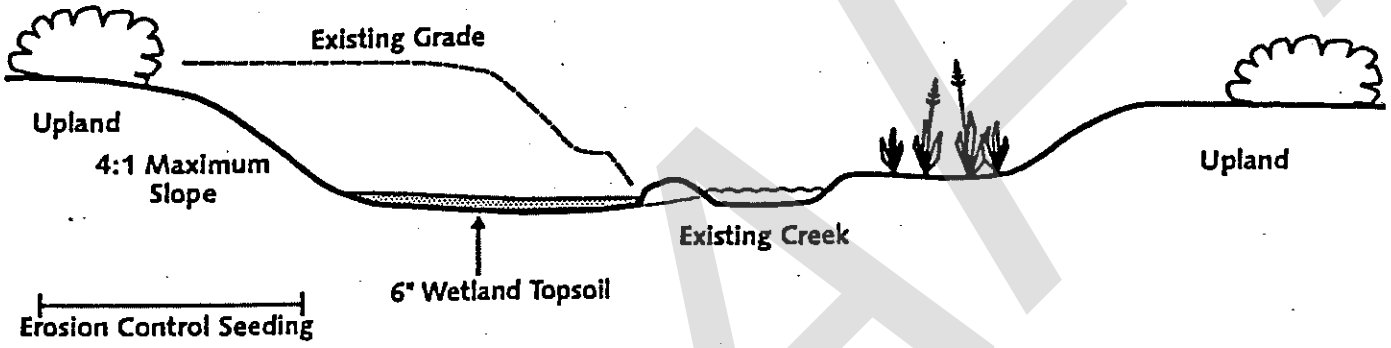
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03-97(COV631)

Figure 7

LSA Not to scale

Mitigation Site B
Sewage Treatment Ponds Conceptual Cross-section



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Figure 8

LSA Not to scale

Mitigation Site C
Horse Creek Conceptual Cross-section

commencement of grading/construction in the vicinity.

- Following the staking, orange construction fencing will be installed along the length of the wetland boundary to prevent any construction activities from disturbing the existing wetlands. No work or staging activities shall occur beyond the orange construction fencing unless specifically approved by the biological monitor.

- Prior to the commencement of grading/construction, a qualified biological monitor shall be retained to ensure that the grading/construction activities in the vicinity of existing wetlands/mitigation areas are conducted in accordance with this mitigation plan. The monitor shall be on-site at least once a day to monitor the construction activities and address any issues that may arise during grading/construction in the vicinity of existing wetlands/mitigation areas.

PLANTING PLAN

Seasonal Wetlands

The seasonal wetlands will be revegetated by germination of the seed bank within the topsoil contained in the stockpiled material and by natural colonization. Because of the location of the seasonal wetlands in relation to existing avoided wetlands and drainages on the project site, many hydrophytic plants are expected to rapidly colonize the seasonal wetlands naturally.

The plant species expected to colonize the created wetlands are shown on Table B.

Drainages

The Horse Creek widening will be revegetated by germination of the seed bank within the topsoil contained in the stockpiled material and by natural colonization. Because of the location of the widened drainage in relation to existing Horse Creek, many hydrophytic plants are expected to rapidly colonize naturally.

The plant species expected to colonize the created wetlands are shown on Table B. In addition to the species listed in Table B, willows may establish themselves in the widened drainage.

EROSION CONTROL

Areas disturbed by grading for the mitigation sites will be provided with a temporary cover crop consisting primarily of native grasses and forbs to

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Table B - Plant Species Expected to Colonize Created Wetlands and Waters

Species	Common Name	Indicator Status[1]
Cyperus sp.	Nutsedge	FACW
Echinochloa sp.	Barnyard Grass	FACW
Epilobium sp.	Willow-Herb	FAC/FACW
Eryngium sp	Button-Celery	OBL
Hemizonia pungens	Common Spikeweed	FAC
Hordeum murinum	Barley	FAC
Lactuca serriole	Prickly Lettuce	FAC
Leptochloa sp.	Sprangletop Grass	FACW
Lolium sp.	Wild ryegrass	FAC
Lythrum hyssopifolium	Hyssop Loosestrife	FACW
Plantago lanceolata	English Plantain	FAC-
Polygonum arenastrum	Common Knotweed	FAC
Rumex acetosella	Sheep Sorrel	FAC-
Rumex crispus	Curley Dock	FACW-
Typha sp.	Cattail	OBL

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1 USFWS indicator status from *National List of Plant Species that Occur in Wetlands;* OBL - Obligate Wetland; FACW - Facultative Wetland; FAC - Facultative

prevent soil erosion and provide habitat enhancement. Erosion control seeding activities will take place in the fall so that sown seeds can benefit from winter rains.

The proposed erosion control hydroseed mix is shown in Table C. The mixture consists of a cover crop, native perennial grasses and forbs, tackifier, and mulch, and will be applied by means of hydroseeding/hydromulching or drilling. The seed mix will be comprised of native plant species with the exception of the cover crop. Zorro fescue was chosen as the cover crop for its ability to germinate quickly, provide effective erosion control, and then die off after one or two growing seasons. The other species were selected because they are native to the local area or grow in similar climates and are commercially available.

Erosion control measures, such as biotechnical slope protection (coir or jute blanket), riprap, concrete apron or other effective techniques will be incorporated into the design where concentrated flows or steep slopes are present.

IRRIGATION PLAN

No irrigation is proposed for the replacement seasonal wetlands. The seasonal wetland and widened drainage will receive sufficient water from direct precipitation and due to flooding events from the adjacent drainage channel.

AS-BUILT CONDITIONS

An as-built report will be submitted to the Corps within 60 days after the wetland construction is completed. The report will include, but not be limited to, modifications to the original design, finish contours of mitigation sites, and the names and phone numbers of all contractors and subcontractors who worked on the project.

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Table C - Erosion Control Seed Mix

Seed Species	Function	Lbs. Per Acre
Anderson variety blue wildrye (*Elymus glaucus*)	perennial	6 lbs.
California brome CA variety (*Bromus carinatus*)	perennial	6 lbs.
California poppy (*Eschscholzia californica*)	annual	1 lb.
Lupine (*Lupinus succulentus*)[1]	nitrogen fixing	2 lbs.
Meadow barley (*Hordeum brachyantherum*)	perennial	10 lbs.
Zorro fescue (*Vulpia myuros*)	cover crop	10 lbs.
Mulch		2000 lbs.
Tackifier		100 lbs

[1]Seed will be treated with nitrogen-fixing bacteria inoculant by the seed supplier on the seed supplier's recommendation.

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MAINTENANCE DURING MONITORING PERIOD

MAINTENANCE ACTIVITIES

During the monitoring period until the performance criteria are satisfied, maintenance and monitoring of the mitigation areas will be the responsibility of the City. A qualified restoration ecologist will be retained by the City to provide maintenance services to the extent necessary to assure meeting the performance standards. Existing wetlands to be preserved will be temporarily fenced at the perimeter during construction to avoid construction impacts.

Short-term maintenance will include repairs to fences, large weed eradication (either by hand or by application of an herbicide labeled for such use), trash removal, and erosion damage repair. As discussed below, maintenance of the storm water detention basin will include periodic removal of silt and sediment buildup. Care will be taken during maintenance activities to minimize disturbance of wetland vegetation within the designated seasonal wetland mitigation areas.

Weed species targeted for removal include giant reed (*Arundo donax*), fennel (*Foeniculum vulgare*), tree tobacco (*Nicotiana glauca*), tamarisk (*Tamarix* spp.), and castor bean (*Ricinus communis*).

Seasonal Wetlands/Detention Basin

Sediment removal is anticipated to occur approximately every 4 to 10 years or more. Sediment will be removed whenever more than an average of 6 inches of material has accumulated in the replacement seasonal wetland. The seasonal wetland will then be returned to approximately its original contours in a two-step process, with the eastern half of the wetland being cleared out one year and the western half two years later. This process will allow for natural revegetation of the first half of the replacement wetland during the intervening two years. Earthwork activities such as sediment removal will be limited to the June 15 - October 15 period when the wetland is dry to minimize wetland impacts. No equipment will be allowed in the portion of the pond that is not being cleared out that year.

RESPONSIBLE PARTIES

Once the Corps confirms that the performance criteria have been met, the completion of the mitigation program, long-term maintenance of the mitigation areas will be accomplished through a public or private organization, with the assistance of qualified consultants. This management entity will be established to ensure its ability to carry out the financial and technical requirements to accomplish the long-term management objectives. The replacement seasonal wetland and plantings will be maintained by the City. Maintenance activities will not be necessary on a regular basis, but will be

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limited to correcting any major problems that may occur, such as substantial mortality of trees or shrubs due to disease or other causes, or a malfunction of the inlet or outlet structures for the seasonal wetland.

SCHEDULE

Maintenance activities will occur on a quarterly basis for the first two years and bi-annually for the next three years. Frequency of maintenance visits will be adjusted as necessary.

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MONITORING PLAN

FINAL SUCCESS CRITERIA

Target Functions and Values

Seasonal Wetlands

The mitigation plan proposes to create new seasonal wetlands that are functionally equal to the seasonal wetlands being filled. The replacement seasonal wetlands will provide intermittent ponding/saturated areas to establish similar plant communities compared to the seasonal wetlands to be filled.

Drainages

The widening of Horse Creek is intended to enhance the overall habitat value of the drainage by increasing the cover of wetland plants. The widening of the drainage will be of equal value to the drainages being filled. The widened area will provide cover and forage opportunities for a variety of wildlife.

Target Hydrologic Regime

Following construction of the new seasonal wetland, a storm of 1 inch or greater is expected to provide enough storm water runoff to fill the created wetlands and waters to a depth of 1 inch.

TARGET JURISDICTIONAL ACREAGE TO BE CREATED/ENHANCED

The target jurisdictional acreage to be created equals a total of 9.00 acres, composed of 8.58 acres of seasonal wetlands in the Northeast Detention Basin, Southwest Seasonal Wetland, and former Sewage Treatment Ponds and at least 0.42 acre of drainages.

PERFORMANCE CRITERIA

To assess success, the performance standards described below will be applied. Target percentages for dominant species were established for different wetland types based on evaluations of wetland areas to be filled. Dominant species represented plants that characterized vegetation communities in the wetland locations to be filled.

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Seasonal Wetlands

The created seasonal wetlands will occupy at least 8.58 acres. Acreage will be determined based on the extent of hydrophytic vegetation, as measured by the methods outlined in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987). The mitigation effort for seasonal wetlands will be considered successful when these and the performance standards listed below have been achieved, provided that this assessment must occur at least five years after the wetlands are created or three years after the last human intervention, other than the normal maintenance activities described above, whichever comes later.

- Greater than 60% vegetative cover of the wetlands and greater than 40% vegetative cover of the sideslopes with herbaceous plant species.
- Greater than 50% of the species within the wetlands are hydrophytic (FAC or wetter).
- Saturated soils for a duration of 14 days or longer per year.

Drainages

The widened drainage will occupy at least 0.42 acre. Acreage will be determined based on the extent of hydrophytic vegetation, as measured by the methods outlined in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987). The mitigation effort for widened drainage will be considered successful when these and the performance standards listed below have been achieved, provided that this assessment must occur at least five years after the wetlands are created or three years after the last human intervention, other than the normal maintenance activities described above, whichever comes later.

- Greater than 30% vegetative cover of the drainage bottom and greater than 40% vegetative cover of the sideslopes with herbaceous and woody plant species.
- Greater than 50% of the species within the widened drainage are hydrophytic (FAC or wetter).
- Saturated soils for a duration of 14 days or longer per year.

MONITORING METHODS

Monitoring

The City will designate a restoration ecologist qualified in the creation and management of freshwater wetlands to serve as the project monitor. The

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monitor will assess compliance with the wetland mitigation plan. The monitor will notify the City and the Corps of any instances of noncompliance with the plan or related problems that may require correction. Situations that require immediate corrective action will be reported within one week after the monitor discovers such conditions.

The created wetlands will be monitored for a period of five years after installation or until performance standards are achieved, whichever is later. Annual monitoring will assess the approximate plant cover of hydrophytic vegetation in created wetland regions of the new detention basin. Water levels in the created wetlands will be monitored.

The new wetlands will be monitored for compliance with the performance standards outlined herein. Should major corrective measures be considered necessary, the City will submit a corrective action plan demonstrating how the performance standards will be achieved, or substitute an acceptable alternative plan. Monitoring will be continued as specified above after any major corrective action.

Construction Monitoring

The construction of the created wetlands and waters, including excavation, topsoil stockpiling, topsoil placement, seed installation, and maintenance, will be monitored by a restoration ecologist.

Vegetation Monitoring

Assessments will note overall cover, general health of vegetation, hydrologic regime, erosion, and vandalism. The mitigation sites will each be monitored for a period of five years or until performance criteria have been achieved. The extent of jurisdictional area will be determined by the same methods as used in the wetland delineation. Specifically, subject areas will be paced or measured with tapes in order to determine compensatory mitigation acreage.

Transects will be set up in each created seasonal wetland. These transects will be permanently staked and assessed at 1-foot intervals for plant species and cover. This method will determine the percent cover and species mix along the representative transect.

Qualitative vegetation monitoring will take place once a year in conjunction with a winter hydrologic monitoring visit and will include a plant species list, cover estimates for each species, and identification of dominant species. The monitor will discuss general nature of plant community and establishment trends.

Quantitative vegetation monitoring will take place each year in May during a regularly scheduled monitoring visit. The quantitative monitoring will include

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vegetation cover estimates based upon sampling of vegetation by establishing transects through each mitigation site. Quadrants 0.5 meter on a side will be located randomly along the transects. A minimum of 2 quadrants shall be completed in each compensatory wetland. Data recorded for each quadrant will include species composition and percent cover. Photographs of each wetland mitigation area and representative quadrants will be taken from fixed locations during each site visit.

Hydrologic Monitoring

Hydrologic monitoring will take place during the winter after a storm event and will entail observation and measurement of the extent of inundation and surface soil saturation. A soil auger may be used to determine the depth of soil saturation in cases where the soil is not saturated at the surface. This monitoring will take place at each of the created wetland areas.

Hydrologic monitoring visits will be made beginning January 1 or beginning after the winter rainfall total exceeds 3.0 inches, whichever comes first, and then 7 and 14 days thereafter. The purpose of the visits will be to document the duration and extent of inundation/soil saturation in the mitigation areas. For comparison purposes, hydrologic observations may also be made of existing wetlands to be preserved. The monitor will comment on the adequacy of the hydrologic regime for maintaining the hydrophytic plant community.

Other Observations

The monitor will also search for and document all evidence of wildlife use in mitigation areas. Human interference impacts will be assessed. Corrective actions will be suggested, if necessary.

If interim monitoring visits suggest that the performance standards will not be met in five years, the applicant will submit a corrective actions plan as discussed below.

ANNUAL REPORTS

Monitoring reports will be submitted annually to the Corps thereafter until the end of the monitoring period. In addition to evaluating the progress relative to the performance standards, the reports will include photographs taken each year from permanent photo points that provide north, south, east and west area views of the mitigation areas. Monitoring during the first year will provide early data indicating the likelihood of success of the mitigation program.

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The reports will include a list of names, titles and companies of all persons who prepared the reports and who participated in the monitoring. Reports will be submitted to the following persons/agencies:

District Engineer
Attention: Nancy Haley
Department of the Army
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, CA 95813-2922

Field Office Supervisor
United States Department of the Interior
Fish and Wildlife Service
Ecological Services
Sacramento Field Office
2800 Cottage Way, Room E-1803
Sacramento, CA 95825-1846

Environmental Services Supervisor
Attention: Jerry Mensch
Department of Fish and Game
1701 Nimbus Road
Rancho Cordova, CA 95670

SCHEDULE

Monitoring will begin during the year wetland creation begins and will continue until five years after the new wetlands are created, or until the performance standards are achieved, whichever is longer. The monitor will inspect the seasonal wetlands and drainage within 30 days after the new wetlands are created. Vegetation monitoring will occur bi-annually thereafter, until the end of the monitoring period. Hydrologic monitoring will occur three times per year during the winter.

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COMPLETION OF MITIGATION

NOTIFICATION OF COMPLETION

The Corps will be notified following completion of the initial monitoring period, or at the time the final success criteria have been met. As part of this notification, the City will provide the Corps with a jurisdictional delineation which outlines the new wetland areas.

CORPS CONFIRMATION

A site visit with Corps representatives will be scheduled to verify the results of the mitigation effort. The Corps will provide the City with written confirmation that the performance criteria have been satisfied.

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CONTINGENCY MEASURES

INITIATING PROCEDURES

Corrective measures may be employed if the performance criteria are not met. If performance criteria have not been met within three growing seasons from the date of project completion, then corrective actions may be implemented if the monitoring results indicates that the performance criteria will not be met after five years. Possible actions include reseeding or replanting; weed control; altering the depth of the basins to increase the depth, amount or duration of ponding; fencing; or similar action. If certain planted species are more successful in establishing on-site, those species will be used to replace the less successful species.

Corrective measures will be reported to the Corps at the time of implementation. Additional reports will be produced if a need for substantial corrective action is identified. These reports will identify the performance problem and will include a schedule for taking corrective action. These reports will be submitted to the Corps within 90 days of the date that the corrective action is recognized.

ALTERNATIVE LOCATIONS FOR CONTINGENCY MITIGATION

We believe that the proposed mitigation sites are ideal locations for implementing the mitigation plan, and that any remedial actions should take place on the proposed sites. In the unlikely event that the proposed sites should be found to be unsuitable for completing the mitigation project, then the City will identify alternative sites on its property that are acceptable to the Corps and will modify this plan to conform to the site conditions. The plan will be designed to achieve the same basic objectives and will be subject to Corps approval.

FUNDING MECHANISM

The City will provide all necessary funding to assure completion of the mitigation measures.

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REPORT PREPARERS

Linda Aberbom, Restoration Ecologist/Project Manager
Ross Dobberteen, Wetland Specialist/Principal
Sean O'Brien, Restoration Ecologist/Environmental Analyst
Rob Schonholtz, Wetland Specialist/Principal-in-charge

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REFERENCES

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss. 169 pp.

Hammer, Donald A. 1992. *Creating Freshwater Wetlands.* Lewis Publishers, Inc., Chelsea, Michigan. 298 pp.

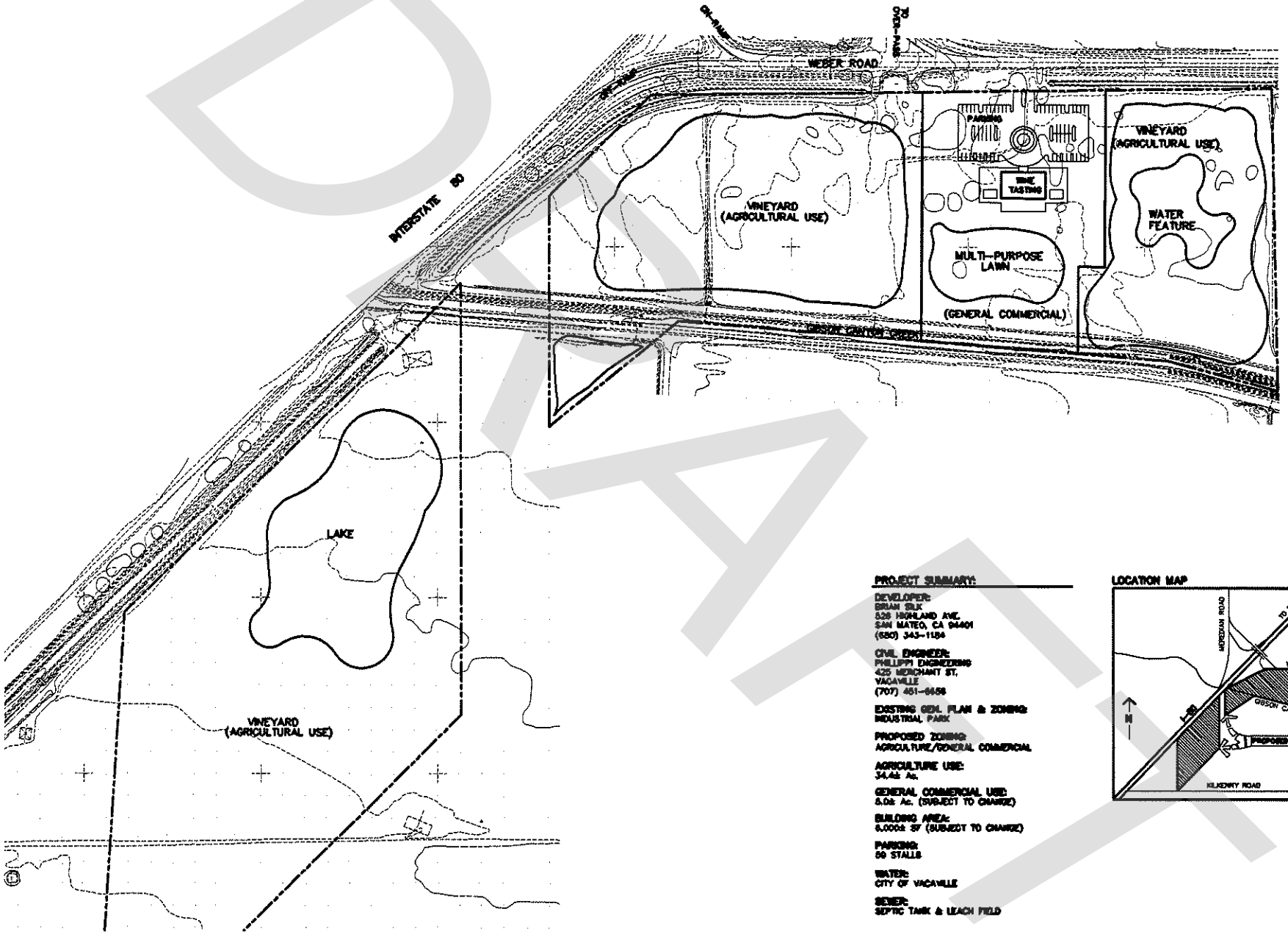
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Munz, P. A. and D. D. Keck. 1968. A California Flora, with Supplement. University of California Press, Berkeley. 1681 + 224 pp.

Reed, P. B. Jr. 1988. *National List of Plant Species that Occur in Wetlands: California (Region 0).* U.S. Fish and Wildlife Service Biological Report 88 (26.10). 135 pp.

U.S.D.A. Soil Conservation Service. 1977. *Soil Survey of Solano County, California.* 112 pp.

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PROJECT SUMMARY:

DEVELOPER:
BRIAN SILK
526 HIGHLAND AVE.
SAN MATEO, CA 94401
(650) 343-1184

CIVIL ENGINEER:
PHILLIPPI ENGINEERING
425 MERCHANT ST.
VACAVILLE
(707) 451-6656

EXISTING GEN. PLAN & ZONING:
INDUSTRIAL PARK

PROPOSED ZONING:
AGRICULTURE/GENERAL COMMERCIAL

AGRICULTURE USE:
34.4± Ac.

GENERAL COMMERCIAL USE:
5.0± Ac. (SUBJECT TO CHANGE)

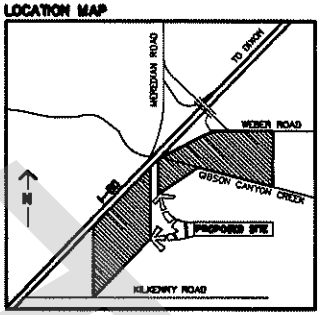
BUILDING AREA:
6,000± SF (SUBJECT TO CHANGE)

PARKING:
50 STALLS

WATER:
CITY OF VACAVILLE

SEWER:
SEPTIC TANK & LEACH FIELD

LOCATION MAP



SCALE: 1"=100'

PHILLIPPI ENGINEERING
425 MERCHANT STREET - VACAVILLE, CA 95688
(707) 451-6656 FAX (707) 451-6646

DESIGNED BY:
DRAWN BY: GRW
CHECKED BY:

PROJECT NAME/LOCATION:
SILK'S PROPERTY
WINERY
VACAVILLE CA

BASIS OF BEARINGS:

CONCEPTUAL SITE PLAN

NO.	DESCRIPTION	DATE
1		

DRAWING FILE:
200220TM
XR: 200220AT

ISSUE DATE: 10/30/00
PROJECT NO.: 200220
SHEET NO.: 1 OF 1

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CITY OF VACAVILLE
INITIAL STUDY
ENVIRONMENTAL INFORMATION FORM

Information Required of Applicants as Part I of Initial Study of Environmental Impacts

---------- For Office Use ----------

Application Number and Title _____

Date submitted: _____

The following information is required for all projects which are subject to review pursuant to the California Environmental Quality Act (CEQA). Complete disclosure of environmental data is required. NOTE: THIS INFORMATION MUST RELATE TO THE DEVELOPMENT AS DESCRIBED IN SECTIONS 9A & 9B. Reference materials needed to complete this application are available at the Advanced and Current Planning Division counters at City Hall, 650 Merchant Street. Answers may be continued on additional sheets. Please print or type.

I. GENERAL INFORMATION

1. Name, address, and telephone number of person to be contacted concerning this project: Bob Farrington, 40 Eldridge St. Suite #14, Vacaville, CA 95688 (707) 449-5656

2. Name and address of legal property owner as shown on tax statement:

City of Vacaville, 650 Merchant St., Vacaville, CA 95688

3. Address of project and/or description of location: 501 Browns Valley Pkwy., Vacaville, CA 95688

4. Assessor's Parcel Number(s) of project site: 0129-220-03, 0129-220-04, 0129-220-05

5. Indicate the project application which accompanies this form: Conditional Use Permit/Revised Zoning, General Plan Amendment

6. Have any preliminary documents been prepared for this project (i.e. level 1,2 or 3 soil assessment, soil study or traffic impact analysis)? If yes, please identify name and date prepared: Abandoned Landfill Study (date unknown), City parks (October 1992) and Recreation Master plan.

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7. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state or federal agencies (i.e. Corps of Engineers, Caltrans, Air Pollution Control District or Solano County): Solano Co. Airport Land Use Commission F.A.A., Army Corp. of Engineers, S.I.D., Fish & Game, Fish and Wildlife, Regional Water Quality Control Board, Dept. of Interior

8A. Existing zoning district(s) of project site: A-20, IP-PP

8B. Existing General Plan designation(s): public park, private recreation, business park

9A. Fully describe the nature and purpose of the proposed project including the ultimate use of the property:

Master plan the City park and incorporate a 76,200 square ft. private recreation building into that plan.

9B. Community benefits to be derived from the project: Increased outdoor & indoor recreation opportunities for youth & adults.

II. PROJECT DESCRIPTION

1. Project Description:

a. Site size in acres or square footage: 135 acres and a 76,200 sq.ft. building.

b. Highest and lowest elevations on site:

c. Number of floors of proposed construction: 2

d. Number of proposed off-street parking spaces provided:

e. Anticipated project schedule (timeline): City park to be built over a 20 year period, recreation building to be built within a year of approval.

f. Is this project dependent on an existing or future project? If yes, please explain: yes, the completion of all related recreation use areas within the Parks Master Plan.

g. Anticipated future phases: multiple - depending on available funding and recreation use/demand.

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h. If RESIDENTIAL, include the number of units, unit sizes, range of sale prices or rents, and gross density (units/acre).

N/A

i. If COMMERCIAL and/or OFFICE, indicate the types, square footage of each type (i.e. office, sales area, restaurant), whether neighborhood, city or regionally oriented, and total square footage of building area:

City & regional oriented commercial 76,200 sq. ft.

private recreation building with sportshop sales.

j. If INDUSTRIAL, indicate type, estimated employment per shift, loading facilities, square footage of office area and total square footage of building area: N/A

k. If INSTITUTIONAL, indicate the major function, estimated employment per shift, estimated occupancy, and total square footage of building:

N/A

l. If the project involves a variance, conditional use permit or rezoning application, state this and explain clearly why it is required:

Private recreation within the proposed Park Master Plan

needs a Conditional Use Permit. The rezoning of the City park site will consolidate the entire site under one Park Planning Designatio vs. 2

m. Number and species of existing trees 6 inches or larger in diameter:

Approximately 8 - Black Willows & 8 Cottonwoods along existing creeks.

n. Number, size and species of trees to be removed:

o. Describe any power lines, water, sewer or storm drain mains, pipelines or other transmission lines which are located on or adjacent to the property:

A City sewer trunk line on the east side of property,

Putah South Canal on the east property line, P.G.&E. High

Power Distribution Lines on west property line.

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p. Name of creeks and natural or man-made drainage channels through or adjacent to the property: Pine Tree Creek, lower & middle forks of Horse Creek.

q. Is there evidence of water travelling over or standing on the site?

yes

r. Primary vehicle access to property comes from which street(s):

Browns Valley Parkway

s. Identify wildlife and/or native plants that are known to exist on the property (include seasonal migrations and/or observations): seasonal water fowl (Coots, ducks, Egrets, Heron, Pheasants Jack Rabbits, Gopher Snakes, Dove & Crows).

t. Are any easements known to traverse the site? If yes, explain the type and purpose: sewer easement (City) - trunk line for Browns Valley.

2. Provide details on existing uses of the site. Are there existing structures on the site? If yes, describe use and whether they will be demolished or relocated; if residential, give the number of current occupants: public soccer and baseball fields, parking lots restroom/concession building - no demolition or relocation.

3. Is site within water and sewer service areas? yes

4. Is site within existing city limits? yes

5. Are there 25% or greater slopes on the property? no

6. Is the site susceptible to landslides? (refer to Figure 9.1 in the General Plan) no

7A. Is any portion of the site within the 100 year floodplain? yes

B. Is any portion of the site within the 500 year floodplain? yes

8. Is the site within an Airport Land Use Plan? If yes, what airport plan(s) is it within and do restrictions affect the proposal? yes - Nut ~~Nut~~ Tree, yes

9. Is the site listed on California EPA's Hazardous Sites List? no

10. What is the farmland designation of the proposed site? (refer to Figure 3-1 in the General Plan) A-20

11. Is the site under agricultural contract? If yes, what is contract # and expiration date? no

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III. ENVIRONMENTAL ANALYSIS

1. Are the following items applicable to the project or its effects? Discuss at end all items checked yes or maybe (attach additional sheets as necessary).

YES	MAYBE	NO		
[X]	[ ]	[ ]	A.	Change in existing features of any lakes, reservoirs or hills, or substantial alteration of ground contours.
[X]	[ ]	[ ]	B.	Change in scenic views or vistas from existing residential areas or public lands or roads.
[X]	[ ]	[ ]	C.	Change in character of general area of project.
[ ]	[ ]	[X]	D.	Produce or involve large amounts of solid waste or litter.
[ ]	[ ]	[X]	E.	Disrupt or adversely affect a historic or archaelogical site.
[ ]	[ ]	[X]	F.	Change in dust, ash, smoke, fumes or odors in vicinity.
[ ]	[X]	[ ]	G.	Change in lake, stream or ground water quality or quantity, or alteration of existing drainage patterns.
[ ]	[ ]	[X]	H.	Substantial change in existing noise or vibration levels in the vicinity.
[X]	[ ]	[ ]	I.	Site on filled land or on slope of 10 percent or more.
[ ]	[ ]	[X]	J.	Use or disposal of potentially hazardous material, such as toxic substances, flammable or explosives.
[X]	[ ]	[ ]	K.	Substantial change in demand for public services (police, fire, water, sewage, schools, etc).
[ ]	[X]	[ ]	L.	Substantially increase fuel or energy consumption (electricity, oil, natural gas, etc).
[X]	[ ]	[ ]	M.	Relationship to a larger project or series of projects.
[ ]	[ ]	[X]	N.	Substantially diminish habitat for fish, wildlife or plants.

A. Master Grading Plan will balance land forms on site but building pads, detention basins, roadways park playing fields & parking will require ~~substa~~ substantial cut & fill. Existing abandoned land-fill will also require 3' of a soil capp.

B. Existing open grassland will now have a building, parking, ornamental landscaping, and recreational turf installed as part of the proposed city park.

C. Grassland/Flood Plain to formal public park.

G. Surface drainage diverted to drainage structures detension basins, and wetland areas.

(SEE ATTACHED)

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2. Attach photographs that provide thorough coverage of the site. Include photographs of the surrounding properties to illustrate type(s) of land use and intensity of development. Snapshots or Polaroid® photos will be accepted.

3. Certification: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. I understand that requests may be made for additional information to complete the application.

Date 12/20/96

Robert Farrington
(Name - print)

(Signature)

Materials that will assist you answer questions include: the city general plan, flood zone maps, assessor parcel books, and zoning map. All are available for review at the Advanced and Current Planning counters, 650 Merchant Street.

c:\word\form\env-form.doc

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I. Billing site will be on compacted/engineered fill, landfill has portions of it's edge that exceed 10% but will be modified with a more gradual contour slope of it's proposed capp.

K. Public park maintenance, Police surveillance, sewer & water use, park landscapes will be watered with raw S.I.D. water from Putah South Canal.

L. Electrical use will increase with the recreation building. Proposed lighting of some athletic fields, parking lots. Park access roads and pathways.

M. The Park Master Plan is integration of several park and recreation uses that are related and could be dependent upon each other for support services and access (i.e. parking, roads, sewer, water, detention basins).

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PERMIT NO: 1902-0294 ON-LINE PERMIT

CITY OF VACAVILLE
650 Merchant Street, CA 95688

INSPECTION REQUEST LINE
(707) 999-7113
OR
SCHEDULE EXISTING INSPECTION
ON-LINE
www.cityofvacaville.com

PERMIT TYPE
PATIO COVER NON-RESIDENTIAL

PERMIT SUB-TYPE
NON-RESIDENTIAL

JOB VALUE **36000**

APN **0129220030**

DESCRIPTION
CENTENNIAL PARK - 2 SHADE SHELTERS AT THE INTERIM DOG PARK

APPLIED DATE
2/26/2019

APPROVED DATE
2/26/2019

ISSUED DATE



PERMIT INFORMATION

SITE	501 BROWNS VALLEY PKWY VACAVILLE, CA
APPLICANT	AMER RIHANI
OWNER	COMMUNITY SERVICES 40 ELDRIDGE AVE VACAVILLE CA 95688
CONTRACTOR	

FEE SUMMARY

075 GENERAL PLAN IMPLEMENTATION FEE	$42.00
005 PLAN CHECK NON-RES	$377.00
008 FIRE PLAN CHECK/INSP FEE	$63.00
017 ELECTRICAL PLAN CHECK	$0.00
001 001 BUILDING FEES	$418.00
027 BUILDING STANDARDS COMMISSION FEE 90%	$1.80
028 BUILDING STANDARDS COMMISSION FEE 10%	$0.20
031 RECORD MAINTENANCE FEE MINOR	$75.00
025 S.M.I.P FEES 95%	$9.50
026 S.M.I.P FEES 5%	$0.50
015 ELECTRICAL FEES - NON RESIDENTIAL	$0.00
Total Fees Collected:	$987.00

NOTE: This job copy of this permit shall be kept on the job site to make the required entries thereon. The permit will expire if work is not started in 180 days, is abandoned, or does not receive an inspection for more than 180 days. Additional fees will be collected to renew expired permits. This is a Building Permit when properly filled out, signed and validated, and is not transferable. Construction Hour: Construction is limited to the hours of 7:00am to 7:00pm each day. No work shall be performed on certain holidays (MMC V-213-3(b)).

LICENSED CONTRACTORS DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.
License No: Expiration Date: Contractor:

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the contractors license Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Pofessions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by an applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

_____ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burdon of proving that he or she did not build or improve for the purpose of sale.)

_____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or Property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)
I am exempt under Sec. _____ B.P.C. for this reason _____
DATE _____ OWNER _____

WORKERS COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:
_____ I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the permit is issued.

_____ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
Carrier/Policy No: _____
(This section need not be completed if the permit is for one hundred dollars ($100) or less).
____ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any number so as to become subject to the workers' compensation laws or California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.
DATE _____ APPLICANT: _____
WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

CONSTRUCTION LENDING AGENCY

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).
DATE _____ APPLICANT: _____
* I certify that I have read this application and state that the above information is correct. I agree to comply with all city ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

SIGNATURE OF APPLICANT OR AGENT :_____ **DATE** _____

INSPECTION SUMMARY

_____ 244-SETBACK FORMS FTG
_____ 406-FRAME-MEP LATH
_____ 967-FINAL ACCESSIBILITY
_____ 999-FINAL**

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Search Operator: Contains

Search Value: 0129220040

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The City of Vacaville, CA makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. Utilization of this website indicates understanding and acceptance of this statement.

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PERMIT NO: 01080238 ON-LINE PERMIT

CITY OF VACAVILLE
650 Merchant Street, CA 95688

INSPECTION REQUEST LINE
(707) 999-7113
OR
SCHEDULE EXISTING INSPECTION
ON-LINE
www.cityofvacaville.com

PERMIT TYPE
ELECTRIC POWER POLE TEMP NON-RESIDENTIAL

PERMIT SUB-TYPE
NON-RESIDENTIAL

JOB VALUE **0**

APN **0129220050**

DESCRIPTION

APPLIED DATE
8/24/2001

APPROVED DATE

ISSUED DATE
8/24/2001

PERMIT INFORMATION

SITE	501 BROWNS VALLEY PARKWAY VACAVILLE, CA 95688
APPLICANT	
OWNER	AGENCY VACAVILLE REDEVELOPMENT 40 ELDRIDGE AV 7 VACAVILLE CA 95688
CONTRACTOR	

FEE SUMMARY

NOTE: This job copy of this permit shall be kept on the job site to make the required entries thereon. The permit will expire if work is not started in 180 days, is abandoned, or does not receive an inspection for more than 180 days. Additional fees will be collected to renew expired permits. This is a Building Permit when properly filled out, signed and validated, and is not transferable. Construction Hour: Construction is limited to the hours of 7:00am to 7:00pm each day. No work shall be performed on certain holidays (MMC V-213-3(b)).

LICENSED CONTRACTORS DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.
License No: Expiration Date: Contractor:

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the contractors license Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Pofessions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by an applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

_____ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burdon of proving that he or she did not build or improve for the purpose of sale.)

_____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or Property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)
I am exempt under Sec. _____ B.P.C. for this reason _____
DATE _____ OWNER _____

WORKERS COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:
_____ I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the permit is issued.

_____ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
Carrier/Policy No: _____
(This section need not be completed if the permit is for one hundred dollars ($100) or less).
____ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any number so as to become subject to the workers' compensation laws or California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.
DATE _____ APPLICANT: _____
WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

CONSTRUCTION LENDING AGENCY

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).
DATE _____ APPLICANT: _____
* I certify that I have read this application and state that the above information is correct. I agree to comply with all city ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

SIGNATURE OF APPLICANT OR AGENT ;_____ **DATE** _____

INSPECTION SUMMARY

_____ Temporary Power Pole
_____ FINAL INSPECTION

DRAFT

PERMIT NO: 06100087 ON-LINE PERMIT

CITY OF VACAVILLE
650 Merchant Street, CA 95688

INSPECTION REQUEST LINE
(707) 999-7113
OR
SCHEDULE EXISTING INSPECTION
ON-LINE
www.cityofvacaville.com

PERMIT TYPE
ELECTRICAL
MISCELLANEOUS NON-RESIDENTIAL

PERMIT SUB-TYPE
NON-RESIDENTIAL

JOB VALUE **0**

APN **0129220050**

DESCRIPTION

APPLIED DATE
10/11/2006

APPROVED DATE

ISSUED DATE
10/20/2006

PERMIT INFORMATION

SITE	501 BROWNS VALLEY PARKWAY VACAVILLE, CA 95688
APPLICANT	
OWNER	AGENCY VACAVILLE REDEVELOPMENT 40 ELDRIDGE AV 7 VACAVILLE CA 95688
CONTRACTOR	

FEE SUMMARY

NOTE: This job copy of this permit shall be kept on the job site to make the required entries thereon. The permit will expire if work is not started in 180 days, is abandoned, or does not receive an inspection for more than 180 days. Additional fees will be collected to renew expired permits. This is a Building Permit when properly filled out, signed and validated, and is not transferable. Construction Hour: Construction is limited to the hours of 7:00am to 7:00pm each day. No work shall be performed on certain holidays (MMC V-213-3(b)).

LICENSED CONTRACTORS DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.
License No: Expiration Date: Contractor:

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the contractors license Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Pofessions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by an applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

_____ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burdon of proving that he or she did not build or improve for the purpose of sale.)

_____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or Property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)
I am exempt under Sec. _____ B.P.C. for this reason _____
DATE _____ OWNER _____

WORKERS COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:
_____ I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the permit is issued.

_____ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
Carrier/Policy No: _____
(This section need not be completed if the permit is for one hundred dollars ($100) or less).
____ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any number so as to become subject to the workers' compensation laws or California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.
DATE _____ APPLICANT: _____
WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

CONSTRUCTION LENDING AGENCY

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DATE _____ APPLICANT: _____
* I certify that I have read this application and state that the above information is correct. I agree to comply with all city ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

SIGNATURE OF APPLICANT OR AGENT ;_____ **DATE** _____

INSPECTION SUMMARY

_____ ROUGH ELECTRICAL
_____ ROUGH ELECTRICAL
_____ FINAL INSPECTION

DRAFT

PERMIT NO: 12060181 ON-LINE PERMIT

CITY OF VACAVILLE
650 Merchant Street, CA 95688

INSPECTION REQUEST LINE
(707) 999-7113
OR
SCHEDULE EXISTING INSPECTION
ON-LINE
www.cityofvacaville.com

PERMIT TYPE
FOUNDATION ONLY NON-RESIDENTIAL

PERMIT SUB-TYPE
NON-RESIDENTIAL

JOB VALUE **3000**

APN **0129220050**

DESCRIPTION
FOUNDATION W/ELECTRICAL HOOK UP TO REPLACE 2 TRAILERS W/1 TR

APPLIED DATE
6/28/2012

APPROVED DATE

ISSUED DATE
8/31/2012

PERMIT INFORMATION

SITE	501 BROWNS VALLEY PARKWAY VACAVILLE, CA 95688
APPLICANT	
OWNER	AGENCY VACAVILLE REDEVELOPMENT 40 ELDRIDGE AV 7 VACAVILLE CA 95688
CONTRACTOR	

FEE SUMMARY

BLDG. STANDARDS COMM. FEE	$1.00
FIRE PLAN CHECK/INSP FEE	$11.00
ELECTRICAL PLAN CHECK	$14.00
ELECTRICAL FEE	$56.00
PLAN CHECK FEE (1ST LOT)	$62.00
RECORD MAINTENANCE FEE-MINOR	$63.00
BUILDING FEE	$76.00
Total Fees Collected:	$283.00

NOTE: This job copy of this permit shall be kept on the job site to make the required entries thereon. The permit will expire if work is not started in 180 days, is abandoned, or does not receive an inspection for more than 180 days. Additional fees will be collected to renew expired permits. This is a Building Permit when properly filled out, signed and validated, and is not transferable. Construction Hour: Construction is limited to the hours of 7:00am to 7:00pm each day. No work shall be performed on certain holidays (MMC V-213-3(b)).

LICENSED CONTRACTORS DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License No: Expiration Date: Contractor:

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the contractors license Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Pofessions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by an applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

_____ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burdon of proving that he or she did not build or improve for the purpose of sale.)

_____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or Property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)

I am exempt under Sec. _____ B.P.C. for this reason _____

DATE _____ OWNER _____

WORKERS COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

_____ I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the permit is issued.

_____ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier/Policy No: _____

(This section need not be completed if the permit is for one hundred dollars ($100) or less).

____ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any number so as to become subject to the workers' compensation laws or California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

DATE _____ APPLICANT: _____

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

CONSTRUCTION LENDING AGENCY

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

DATE _____ APPLICANT: _____

* I certify that I have read this application and state that the above information is correct. I agree to comply with all city ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

SIGNATURE OF APPLICANT OR AGENT :_____ **DATE** _____

INSPECTION SUMMARY

_____ Final Inspection
_____ ROUGH ELECTRICAL
_____ SETBACKS FORMS FOOTINGS
_____ ROUGH ELECTRICAL
_____ SETBACKS FORMS FOOTINGS

DRAFT

PERMIT NO: 2305-0455 ON-LINE PERMIT

CITY OF VACAVILLE
650 Merchant Street, CA 95688

INSPECTION REQUEST LINE
(707) 999-7113
OR
SCHEDULE EXISTING INSPECTION ON-LINE
www.cityofvacaville.com

PERMIT TYPE
ELECTRICAL MISCELLANEOUS NON-RESIDENTIAL

PERMIT SUB-TYPE
NON-RESIDENTIAL

JOB VALUE **578759**

APN **0129220050**

DESCRIPTION
CENTENNIAL PARK - INSTALL NEW POLES & SPORTS LIGHTING

APPLIED DATE
5/31/2023

APPROVED DATE
7/21/2023

ISSUED DATE
7/21/2023

PERMIT INFORMATION

SITE	VACAVILLE, CA
APPLICANT	ANNE CHARLES (CITY OF VACAVILLE)
OWNER	VACAVILLE CITY 40 ELDRIDGE AVE STE 7 VACAVILLE CA 95688
CONTRACTOR	MUSCO SPORTS LIGHTING LLC P O BOX 808 OSKALOOSA IA 52577

FEE SUMMARY

017 ELECTRICAL PLAN CHECK	$1,317.50
Total Fees Collected:	$1,317.50

NOTE: This job copy of this permit shall be kept on the job site to make the required entries thereon. The permit will expire if work is not started in 180 days, is abandoned, or does not receive an inspection for more than 180 days. Additional fees will be collected to renew expired permits. This is a Building Permit when properly filled out, signed and validated, and is not transferable. Construction Hour: Construction is limited to the hours of 7:00am to 7:00pm each day. No work shall be performed on certain holidays (MMC V-213-3(b)).

LICENSED CONTRACTORS DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.
License No: Expiration Date: Contractor:

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the contractors license Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Pofessions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by an applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

_____ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burdon of proving that he or she did not build or improve for the purpose of sale.)

_____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or Property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)
I am exempt under Sec. _____ B.P.C. for this reason _____
DATE _____ OWNER _____

WORKERS COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:
_____ I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the permit is issued.

_____ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
Carrier/Policy No: _____
(This section need not be completed if the permit is for one hundred dollars ($100) or less).
____ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any number so as to become subject to the workers' compensation laws or California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.
DATE _____ APPLICANT: _____
WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

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DATE _____ APPLICANT: _____
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SIGNATURE OF APPLICANT OR AGENT :_____ **DATE** _____

INSPECTION SUMMARY

_____ 999-FINAL**
_____ 379-ROUGH ELECTRICAL
_____ 154-ON SITE ELECTRIC

DRAFT

PERMIT NO: 2403-0120 ON-LINE PERMIT

CITY OF VACAVILLE
650 Merchant Street, CA 95688

INSPECTION REQUEST LINE
(707) 999-7113
OR
SCHEDULE EXISTING INSPECTION ON-LINE
www.cityofvacaville.com

PERMIT TYPE
ACCESSORY STRUCTURE NON-RESIDENTIAL

PERMIT SUB-TYPE
NON-RESIDENTIAL

JOB VALUE **53687.21**

APN **0129220050**

DESCRIPTION
CENTENNIAL PARK - 600sf CANTILEVER FABRIC SHADE STRUCTURE

APPLIED DATE
3/11/2024

APPROVED DATE

ISSUED DATE

PERMIT INFORMATION

SITE	501 BROWNS VALLEY PKWY VACAVILLE, CA 95688
APPLICANT	VACAVILLE PARKS & REC C/O TRISHIA CAGUIAT 40 ELDRIDGE AVE VACAVILLE CA 95688
OWNER	VACAVILLE CITY 40 ELDRIDGE AVE STE 7 VACAVILLE CA 95688
CONTRACTOR	SHADE STRUCTURES INC DBA USA SHADE & FABRIC STRUCTURES P O BOX 3467 COPELL TX 75019

FEE SUMMARY

075 GENERAL PLAN IMPLEMENTATION FEE	$56.00
005 PLAN CHECK NON-RES	$502.00
008 FIRE PLAN CHECK/INSP FEE	$84.00
027 BUILDING STANDARDS COMMISSION FEE 90%	$2.70
001 001 BUILDING FEES	$557.00
028 BUILDING STANDARDS COMMISSION FEE 10%	$0.30
031 RECORD MAINTENANCE FEE MINOR	$91.00
025 S.M.I.P FEES 95%	$14.25
026 S.M.I.P FEES 5%	$0.75
Total Fees Collected:	$1,308.00

NOTE: This job copy of this permit shall be kept on the job site to make the required entries thereon. The permit will expire if work is not started in 180 days, is abandoned, or does not receive an inspection for more than 180 days. Additional fees will be collected to renew expired permits. This is a Building Permit when properly filled out, signed and validated, and is not transferable. Construction Hour: Construction is limited to the hours of 7:00am to 7:00pm each day. No work shall be performed on certain holidays (MMC V-213-3(b)).

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_____ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner or property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burdon of proving that he or she did not build or improve for the purpose of sale.)

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I am exempt under Sec. _____ B.P.C. for this reason _____

DATE _____ OWNER _____

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Carrier/Policy No: _____

(This section need not be completed if the permit is for one hundred dollars ($100) or less).

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SIGNATURE OF APPLICANT OR AGENT :_____ **DATE** _____

INSPECTION SUMMARY

_____ 100-SWPPP
_____ 127-ROUGH GRADING
_____ 316-ROOF NAILING
_____ 397-LATH/SIDING
_____ 406-FRAME
_____ 469-WALLBOARD
_____ 967-FINAL ACCESSIBILITY
_____ 974-FINAL FIRE
_____ 999-FINAL**
_____ 244-SETBACK-FORMS-FTG
_____ 255-SLAB FLOOR HOLD DOWN

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- Apply / New Permit
- Search Permit
- Pay Fees
- Fees Estimator

Projects
- Apply for New Project
- Search Projects

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- Search Contractors

Properties
- Search Property

Inspections
- Schedule
- Cancel
- Scheduled

Violations
- Search

Shopping Cart
- Pay All Fees
- Paid Items

Contact
- Contact us

Permit Search

Search By: SITE_APN

Search Operator: Equals

Search Value: 0133070300

SEARCH

Click here for search examples

There were no results to match your search.

The City of Vacaville, CA makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. Utilization of this website indicates understanding and acceptance of this statement.

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Search Applications

Enter information below to search for records.

- Site Address
- Contractor License Information
- Parcel Number
- Record Information
- Contact Information

Select the search type from the drop-down list.

General Search

General Searc

Record Number:

Record Type: Selec

Project Name:

Start Date: /22/1887

End Date: 3/1 /2 2

License Type: Selec

State License Number:

First:

Last:

Name of Business:

Business License #:

Street No.: From - To

Direction: Selec

Street Name:

Street Type: Selec

Unit Type: Selec

Unit No.:

Parcel No.: 12922 3

City: Vacaville

State: C

Zip:

Country: Selec

Search | Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

675 Texas Street Suite 5500
Fairfield, CA 94533
Ph: (707) 784-6765

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- Contact Information

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Record Type: Selec

Project Name:

Start Date: /22/1887

End Date: 3/1 /2 2

License Type: Selec

State License Number:

First:

Last:

Name of Business:

Business License #:

Street No.: From - To

Direction: Selec

Street Name:

Street Type: Selec

Unit Type: Selec

Unit No.:

Parcel No.: 12922

City: Vacaville

State: C

Zip:

Country: Selec

Search | Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

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Ph: (707) 784-6765

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Search Applications

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- Site Address
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- Parcel Number
- Record Information
- Contact Information

Select the search type from the drop-down list.

General Search

General Searc

Record Number:

Record Type: Selec

Project Name:

Start Date: /22/1887

End Date: 3/1 /2 2

License Type: Selec

State License Number:

First:

Last:

Name of Business:

Business License #:

Street No.: From - To

Direction: Selec

Street Name:

Street Type: Selec

Unit Type: Selec

Unit No.:

Parcel No.: 12922 5

City: Vacaville

State: A

Zip:

Country: Selec

Search | Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

675 Texas Street Suite 5500
Fairfield, CA 94533
Ph: (707) 784-6765

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General Information | Home | Building | Business Licenses | Enforcement | Environmental Health | Public Works | Planning

Search Applications

Enter information below to search for records.

- Site Address
- Contractor License Information
- Parcel Number
- Record Information
- Contact Information

Select the search type from the drop-down list.

General Search

General Searc

Record Number:

Record Type: Selec

Project Name:

Start Date: /22/1887

End Date: 3/1 /2 2

License Type: Selec

State License Number:

First:

Last:

Name of Business:

Business License #:

Street No.: From - To

Direction: Selec

Street Name:

Street Type: Selec

Unit Type: Selec

Unit No.:

Parcel No.: 133 7 3

City: Vacaville

State: CA

Zip:

Country: Selec

Search | Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

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Fairfield, CA 94533
Ph: (707) 784-6765

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Solano County California

CITIZEN PORTAL

Logged in as:Stefan Birardi Collections (0) Cart (0) Account Management Logout

Searc ...

General Information | Home | Building | Business Licenses | Enforcement | Environmental Health | Public Works | Planning

Create an Applicati n **Search Appl cat ns**

Records

Show on Map

Showing 0-0 of 0

Date	Record Number	Record Type	Description	Project Name	Expiration Date	Status	Action	Short Notes
No records found.								

Enter information below to search for records.

- Site Address
- Contractor License Information
- Parcel Number
- Record Information
- Contact Information

Select the search type from the drop-down list.

General Search

General Searc

Search my records only

Record Number:

Record Type: Selec

Project Name:

Start Date: /22/1887

End Date: 3/1 /2 2

License Type: Selec

State License Number:

First:

Last:

Name of Business:

Business License #:

Street No.: From - To

Direction: Selec

Street Name:

Street Type: Selec

Unit Type:

Unit No.:

Parcel No.:

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--Select-- 012 2200 0

City: State: Zip:

Country:
--Select--

Search Additional Criteria

Search Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

675 Texas Street Suite 5500
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Ph: (707) 784-6765

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Solano County California

CITIZEN PORTAL

Logged in as:Stefan Birardi Collections (0) Cart (0) Account Management Logout

Searc ...

General Information | Home | Building | Business Licenses | Enforcement | Environmental Health | Public Works | Planning

Create an Applicati n **Search Appl cat ns**

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Show on Map

Showing 0-0 of 0

Date	Record Number	Record Type	Description	Project Name	Expiration Date	Status	Action	Short Notes
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- Record Information
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General Search

General Searc

Search my records only

Record Number:

Record Type: Selec

Project Name:

Start Date: /22/1887

End Date: 3/1 /2 2

License Type: Selec

State License Number:

First:

Last:

Name of Business:

Business License #:

Street No.: From - To

Direction: Selec

Street Name:

Street Type: Selec

Unit Type:

Unit No.:

Parcel No.:

DRAFT

--Select-- 012 2200 0

City: State: Zip:

Country:
--Select--

Search Additional Criteria

Search Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

675 Texas Street Suite 5500
Fairfield, CA 94533
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DRAFT

Solano County California

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Searc ...

General Information | Home | Building | Business Licenses | Enforcement | Environmental Health | Public Works | Planning

Create an Applicati n **Search Appl cat ns**

Records

Show on Map

Showing 0-0 of 0

Date	Record Number	Record Type	Description	Project Name	Expiration Date	Status	Action	Short Notes
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Direction: Selec

Street Name:

Street Type: Selec

Unit Type:

Unit No.:

Parcel No.:

DRAFT

--Select-- 012 2200 0

City: State: Zip:

Country:
--Select--

Search Additional Criteria

Search Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

675 Texas Street Suite 5500
Fairfield, CA 94533
Ph: (707) 784-6765

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Solano County California

CITIZEN PORTAL

Logged in as:Stefan Birardi Collections (0) Cart (0) Account Management Logout

Searc ...

General Information | Home | Building | Business Licenses | Enforcement | Environmental Health | Public Works | Planning

Create an Applicati n **Search Appl cat ns**

Records

Show on Map

Showing 0-0 of 0

Date	Record Number	Record Type	Description	Project Name	Expiration Date	Status	Action	Short Notes
No records found.								

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Record Type: Selec

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Start Date: /22/1887

End Date: 3/1 /2 2

License Type: Selec

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Last:

Name of Business:

Business License #:

Street No.: From - To

Direction: Selec

Street Name:

Street Type: Selec

Unit Type:

Unit No.:

Parcel No.:

DRAFT

--Select-- 01330 0300

City: State: Zip:

Country:
--Select--

Search Additional Criteria

Search Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

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Fairfield, CA 94533
Ph: (707) 784-6765

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Solano County California

CITIZEN PORTAL

Logged in as:Stefan Birardi | Collections (0) | Cart (0) | Reports (2) | Account Management | Logout

Searc ...

General Information | Home | Building | Business Licenses | Enforcement | Environmental Health | Public Works | Planning

Create an Applicati n | **Search Appl cat ns**

Records

Showing 0-0 of 0

Date	Record Number	Record Type	Description	Project Name	Expiration Date	Status	Action	Short Notes
No records found.								

Enter information below to search for records.

- Site Address
- Contractor License Information
- Parcel Number
- Record Information
- Contact Information

Select the search type from the drop-down list.

General Search

General Searc

Search my records only

Search All Records

Record Number:

Record Type: Selec

Facility Name:

Start Date: /22/1887

End Date: 3/1 /2 2

License Type: Selec

State License Number:

First:

Last:

Name of Business:

Business License #:

Street No.: From - To

Direction: Selec

Street Name:

Street Type: Selec

Unit Type: Selec

Unit No.:

City:

State:

Zip:

DRAFT

Parcel No.:
0129220030

Country:
--Sele --

Search Additional Criteria

Search Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

675 Texas Street Suite 5500
Fairfield, CA 94533
Ph: (707) 784-6765

DRAFT

Solano County California

CITIZEN PORTAL

Logged in as:Stefan Birardi | Collections (0) | Cart (0) | Reports (2) | Account Management | Logout

Searc ...

General Information | Home | Building | Business Licenses | Enforcement | Environmental Health | Public Works | Planning

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Showing 0-0 of 0

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Start Date: /22/1887

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Unit Type: Selec

Unit No.:

City:

State:

Zip:

DRAFT

Parcel No.:
0129220040

Country:
--Sele --

Search Additional Criteria

Search Clear

Notice:
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675 Texas Street Suite 5500
Fairfield, CA 94533
Ph: (707) 784-6765

DRAFT

Solano County California

CITIZEN PORTAL

Register for an Account | Reports (2) | Login

Search...

General Information | Home | Building | Business Licenses | Enforcement | Environmental Health | Public Works | Planning

Search Applications

Record 500486-16F-1:
Food Facility Permit
Record Status: Active
Expiration Date: 09/30/2024

Record Info | Payments | Custom Component

Print Permit

Work Location

501 BROWNS VALLEY *
VACAVILLE CA 95687

Record Details

Project Description:
CENTENNIAL PARK
IMAGED BOX 519

More Details

Related Contacts

Emergency Contact information
Primary Phone:7074696556

Business Owner information
1001 ALLISON DR
VACAVILLE, CA, 95687
Primary Phone:7074696556
E- Richard.Begell@CityOfVacaville.com
mail:

Accounts Receivable information
1001 ALLISON DR
VACAVILLE, CA, 95687
Primary Phone:7074696556
E- Richard.Begell@CityOfVacaville.com
mail:

Application Information

Facility Information
Facility DBA: CENTENNIAL PARK
Veterans Exemption: No
Non Profit: Yes

Food Facility Information
Work Description: New Construction
School: Not a School
Host Facility: No

Agency Specific Information
Program Element: Establishment - Non-Profit Type 1

Parcel Information

0) Parcel Number:0129220050
Block:--
Lot:--
Subdivision:--

DRAFT

Solano County Department of Resource Management
Environmental Health Division

Food Facility Permit

issued to

CENTENNIAL PARK

Permit Number: 500486-16F-1
Expiration Date: 9/30/2024

Trey Strickland

Trey Strickland, REHS

NON TRANSFERABLE

THIS PERMIT IS ISSUED SUBJECT TO ALL STATE LAWS AND ORDINANCES IN THE COUNTY, STATE OF CALIFORNIA, AND IS REVOCABLE FOR VIOLATION AT ANY TIME.

Mailing Address:

CITY OF VACAVILLE
1001 ALLISON DR
VACAVILLE, CA 95687

CENTENNIAL PARK
501 BROWNS VALLEY Pkwy
VACAVILLE, CA 95687

Risk Type: 1

DRAFT

Record 501004-44G-1:
Solid Waste Facility
Record Status: Active
Expiration Date: 01/01/9999

Record Info Payments Custom Component

Print Permit

Work Location

0 BROWNS VALLEY
VACAVILLE CA 95688

Record Details

Project Description:
VACAVILLE CITY OF LANDFILL
SWIS 48-CR-0002

More Details

Related Contacts

Business Owner information
650 MERCHANT ST
VACAVILLE, CA, 95688
Primary Phone:7074495149

Accounts Receivable information
650 MERCHANT ST
VACAVILLE, CA, 95688
Primary Phone:7074495149

Application Information

So aste Fac ty Info

Type o F c l ty:	Closed Facility Annual Inspection NF 180

FA ILIT INFO MATION

F c l ty DBA: a	VACAVILLE CITY OF LANDFILL

Parcel Information

Parcel Number:0129220050 *
Block:--
Lot:-- Subdivision:--

DRAFT

Solano Count a tm nt of R sou c Manag m nt
Envi onm ntal H alth ivision

Solid Wast Facilit

issued to

VACAVILLE CITY OF LAN FILL

P mit Numb : 501004-44G-1
Ex i ation at : 1/1/9999

Trey Strickland, REHS

NON TRANSFERABLE

THIS P RMIT IS ISSU D SUBJ CT TO ALL STAT LAWS AND ORDINANC S IN TH COUNTY, STAT OF CALIFORNIA, AND IS R VOCABL FOR VIOLATION AT ANY TIM .

Mailing Address:

CITY OF VACAVILLE
650 MERCHANT ST
VACAVILLE, CA 95688

VACAVILLE CITY OF LANDFILL
0 BROWNS VALLEY Rd
VACAVILLE, CA 95688

DRAFT

Solano County California

CITIZEN PORTAL

Logged in as:Stefan Birardi | Collections (0) | Cart (0) | Reports (2) | Account Management | Logout

Searc ...

General Information | Home | Building | Business Licenses | Enforcement | Environmental Health | Public Works | Planning

Create an Applicati n | **Search Appl cat ns**

Records

Showing 0-0 of 0

Date	Record Number	Record Type	Description	Project Name	Expiration Date	Status	Action	Short Notes
No records found.								

Enter information below to search for records.

- Site Address
- Contractor License Information
- Parcel Number
- Record Information
- Contact Information

Select the search type from the drop-down list.

General Search

General Searc

Search my records only

Search All Records

Record Number:

Record Type: Selec

Facility Name:

Start Date: /22/1887

End Date: 3/1 /2 2

License Type: Selec

State License Number:

First:

Last:

Name of Business:

Business License #:

Street No.: From - To

Direction: Selec

Street Name:

Street Type: Selec

Unit Type: Selec

Unit No.:

City:

State:

Zip:

DRAFT

Parcel No.:
0133070300

Country:
--Selec --

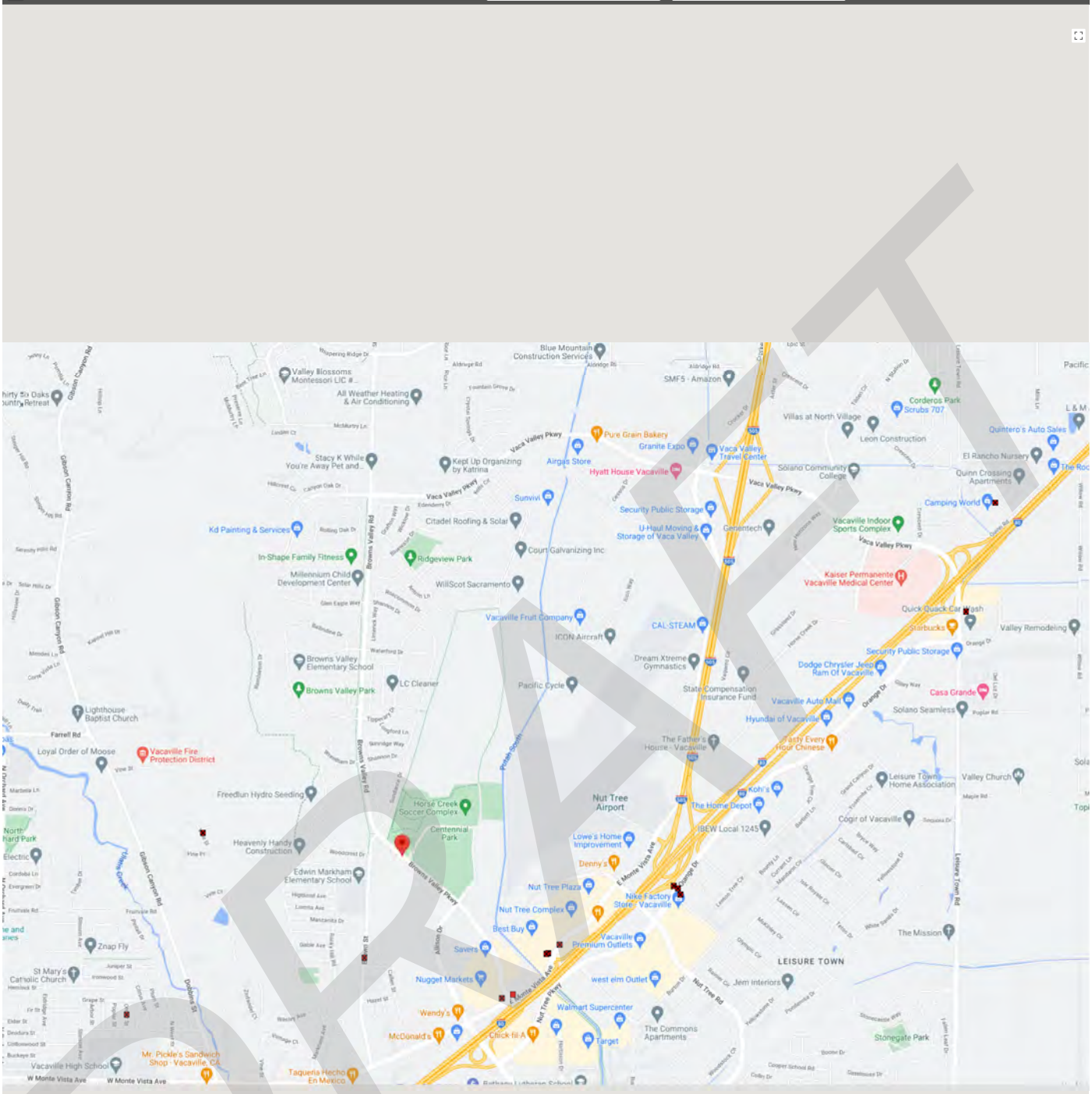
Search Additional Criteria

Search Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

675 Texas Street Suite 5500
Fairfield, CA 94533
Ph: (707) 784-6765

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eoTracker
Ho e
Download Data
Tools
Contact s
Blue Mountain Construction Services
SMF5 - Amazon
Valley Blossoms Montessori LIC #
All Weather Heating & Air Conditioning
Corderos Park Scrubs 707
Villas at North Village
Leon Construction
Quintero's Auto Sales
Pure Grain Bakery
Granite Expo
Vaca Valley Travel Center
Stacy K While You're Away Pet and...
Kept Up Organizing by Katrina
Airgas Store
Hyatt House Vacaville
Solano Community College
El Rancho Nursery
Quinn Crossing Apartments
Sunvivi
Security Public Storage
Camping World
Kd Painting & Services
Citadel Roofing & Solar
U-Haul Moving & Storage of Vaca Valley
Genentech
Vacaville Indoor Sports Complex
In-Shape Family Fitness
Ridgeview Park
Court Galvanizing Inc
Millennium Child Development Center
WillScot Sacramento
Kaiser Permanente Vacaville Medical Center
Vacaville Fruit Company
CAL-STEAM
Quick Quack Car Wash
Starbucks
Valley Remodeling
ICON Aircraft
Dream Xtreme Gymnastics
Security Public Storage
Dodge Chrysler Jeep Ram Of Vacaville
Browns Valley Elementary School
Browns Valley Park
LC Cleaner
Pacific Cycle
State Compensation Insurance Fund
Casa Grande
Vacaville Auto Mall
Solano Seamless
Hyundai of Vacaville
Lighthouse Baptist Church
Farrell Rd
Loyal Order of Moose
Vacaville Fire Protection District
The Father's House - Vacaville
Tasty Every Hour Chinese
Freedlun Hydro Seeding
Horse Creek Soccer Complex
Nut Tree Airport
Kohl's
The Home Depot
Leisure Town Home Association
Valley Church
Cogir of Vacaville
IBEW Local 1245
Centennial Park
Heavenly Handy Construction
Lowe's Home Improvement
Denny's
Edwin Markham Elementary School
Nut Tree Plaza
Nike Factory Store - Vacaville
Nut Tree Complex
Best Buy
Vacaville Premium Outlets
The Mission
Znap Fly
Savers
LEISURE TOWN
St Mary's Catholic Church
Nugget Markets
west elm Outlet
Jem Interiors
Wendy's
Walmart Supercenter
McDonald's
Chick fil A
Target
The Commons Apartments
Stonegate Park
Vacaville High School
Mr. Pickle's Sandwich Shop - Vacaville, CA
Taqueria Hecho En Mexico
W Monte Vista Ave
Vaca Valley Pkwy
Gibson Canyon Rd
Browns Valley Rd
Peabody Rd
Alamo Dr
Leisure Town Rd
Orange Dr
Nut Tree Rd
Dobbins St
LEGEND - CHOOSE MORE SITES
L ST Cleanup Sites - REMOVE
Cleanup Progra Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military ST Sites - REMOVE
Signifies a Closed Site
ACTIVE MAP COVERAGES:
• Military Bases -
LIST SITES VISIBLE ON MAP
Map data ©202 200
Sites Shown on Map
6 Total Sites
pen Sites
5 Closed Sites
6 Sites w/Water Quality Data

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A E UMMAR

REP RT DATE

HA ARD US MATERIAL IN IDENT REP RT FILED WITH ES?

I. REPORTED B -

UN N WN

REATED B

UN N WN

III. ITE LO ATION

FA ILITY NAME
BR WN SHEET LF A A I Vacav lle La f ll

FA ILITY ID

FA ILITY ADDRESS
501 BR WN'S VALLEY
VA AVILLE, A
S LAN UNTY

RIENTATI N F SITE T STREET

R SS STREET

V. UB TAN E RELEA ED / ONTAMINANT( ) OF ON ERN

VI. DI OVER /ABATEMENT

DATE DIS HARGE BEGAN

DATE DIS VERED

H W DIS VERED

DES RIPTI N

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ST P METH D

DES RIPTI N

VII. OUR E/ AU E

S UR E F DIS HARGE

AUSE F DIS HARGE

DIS HARGE DES RIPTI N

VIII. A E T PE

ASE TYPE

IX. REMEDIAL A TION

N REMEDIAL A TI NS ENTERED

X. GENERAL OMMENT

XI. ERTIFI ATION

I HEREB ERTIF THAT THE INFORMATION REPORTED HEREIN I TRUE AND A URATE TO THE BE T OF M KNOWLEDGE.

XII. REGULATOR U E ONL

L AL AGEN Y ASE NUMBER

REGI NAL B ARD ASE NUMBER
5A 80301N01

LO AL AGEN

UN N WN

REGIONAL BOARD

NTA T NAME
BRAD SHELT N

INITIALS
BSS

RGANI ATI N NAME
ENTRAL VALLEY RWQ B (REGI N 5S)

EMAIL ADDRESS
bra .shelto @waterboar s.ca.gov

ADDRESS
11020 Su e ter Dr ve #200
RAN H RD VA, A 956 0

NTA T DES RIPTI N

PHONE T PE	PHONE NUMBER	EXTEN ION
PH NE	(916)- 6 -1588	

DRAFT

o yr ght © 202 State of al for a

Stefan Birardi

From: Stefan Birardi
Sent: Monday, March 18, 2024 6:27 PM
To: r5s-pra@waterboards.ca.gov
Subject: Public Records Request - Former Vacaville Landfill (L10007519403)

Hello,

We are performing a Phase I Environmental Site Assessment on four parcels of land in Vacaville, Solano County, CA. We are seeking information on the Brown Sheet Landfill AKA Vacaville Landfill (L10007519403) since information is not available on Geotracker. Please let me know if records exist.

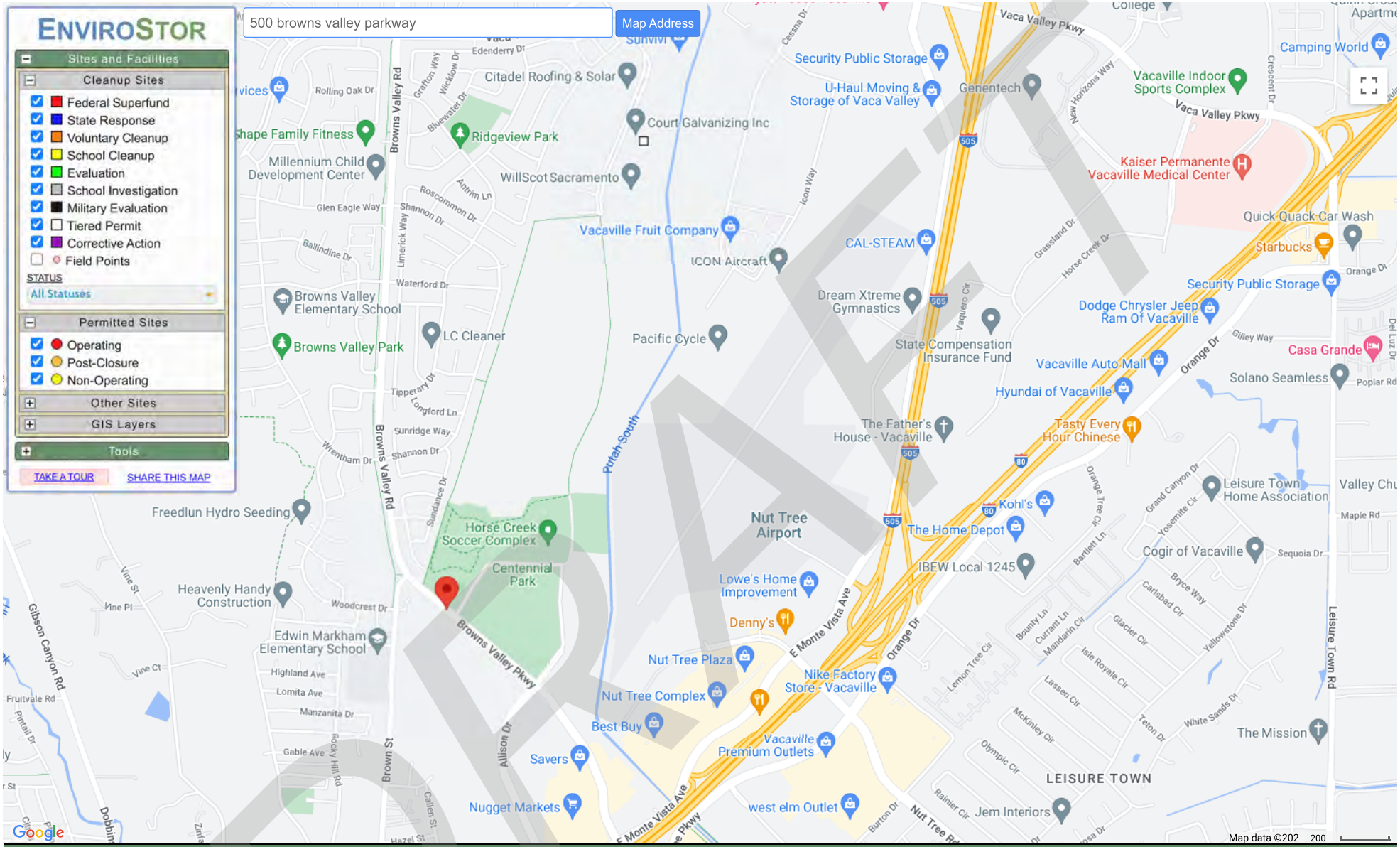
Thank you,
Stefan Birardi
Project Professional

770 First Avenue, Suite 400
San Diego, CA 92101
o| 619.831.4600
m| 203.578.5764



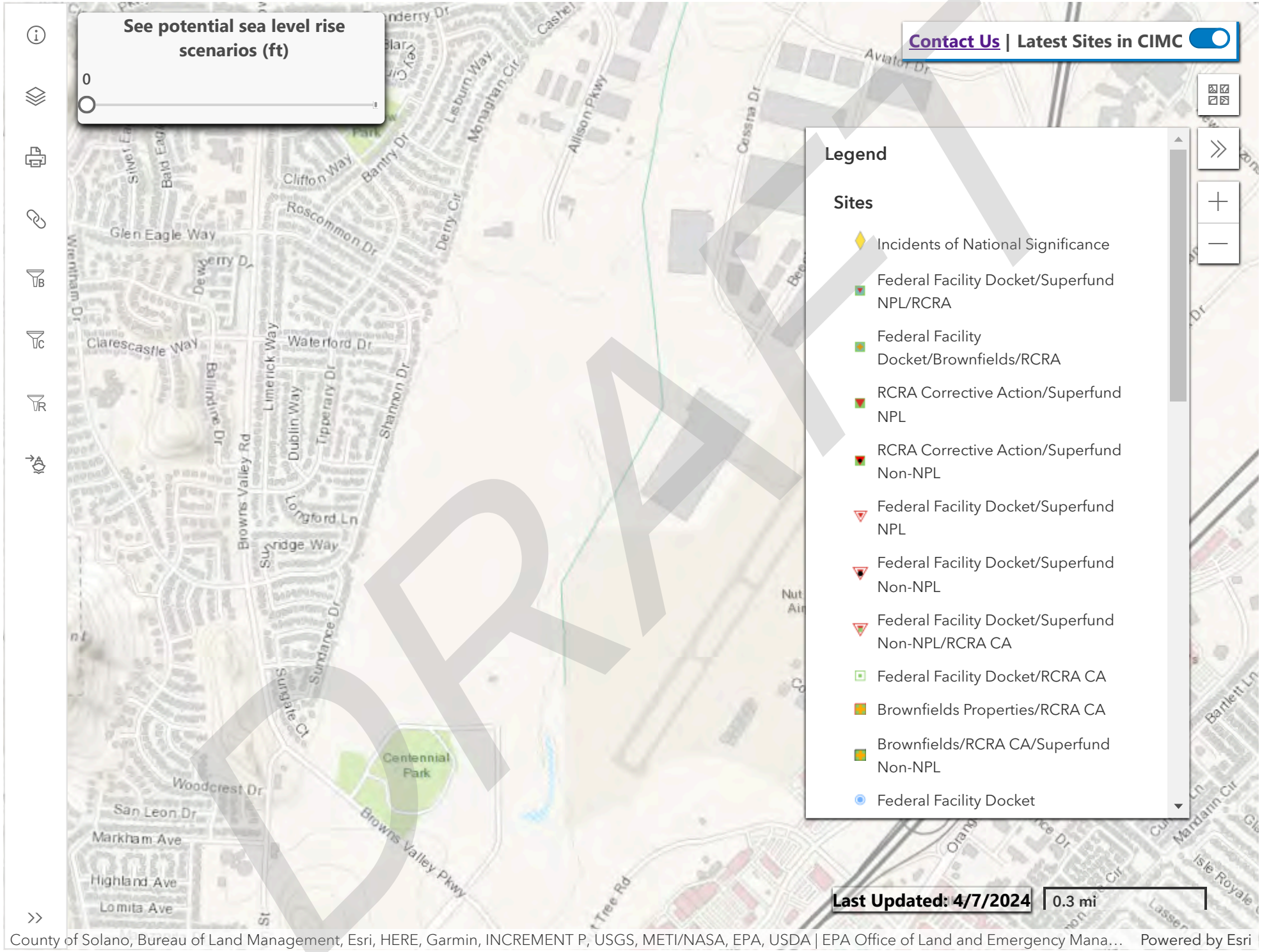
This email may contain confidential information. If you have received this email—including any attachments—in error, please notify the sender promptly and delete the email and any attachments from all of your systems.

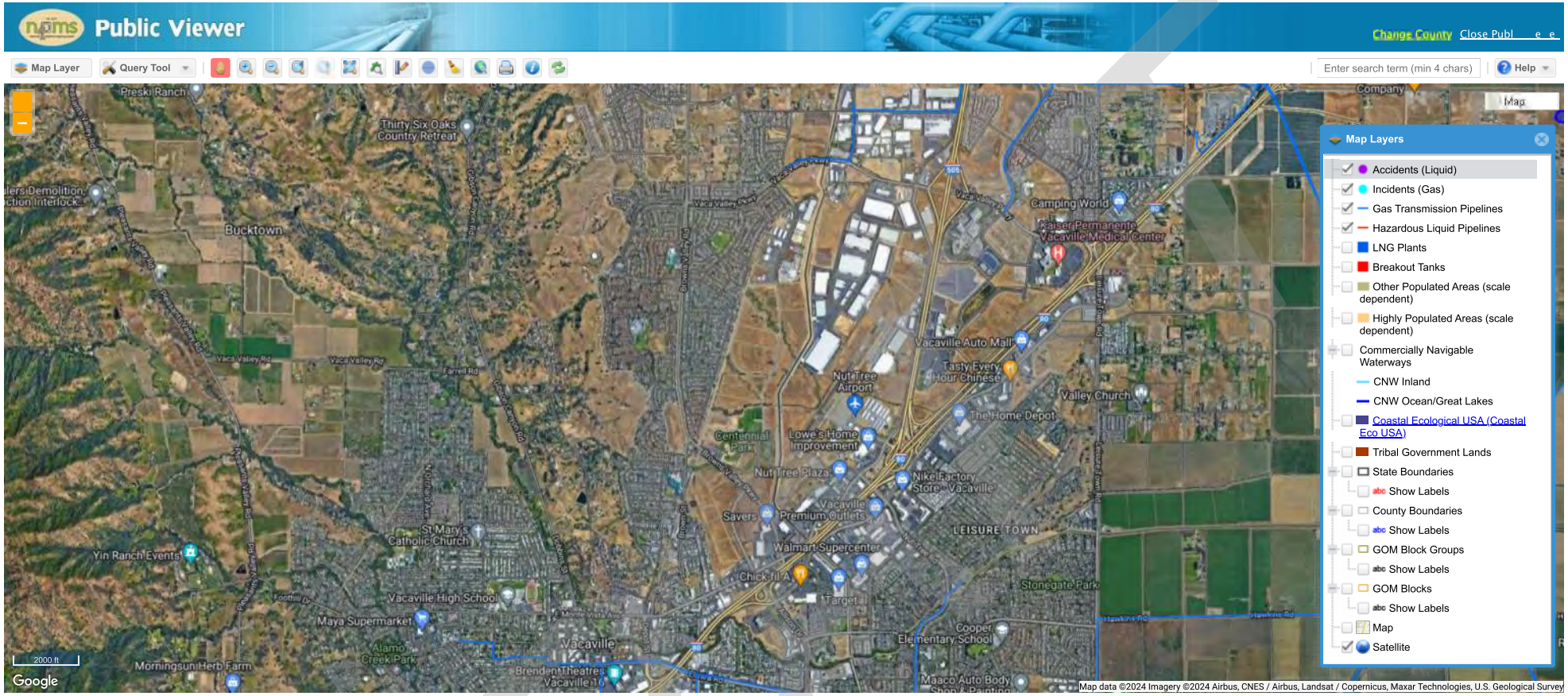
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ITE CURRENTLY VI IBLE ON MAP — 1 ITE LI TE — EXPORT T I LI T TO EXCEL

PROJECT NAME	TATU	PROJECT TYPE	A RE	CITY
OURT GA VAN Z NG, N	NA T VE - NEEDS EVA UAT ON	T ERED PERM T	4937 A SON PARKWA	VA AV E


See potential sea level rise scenarios (ft)
0
Contact Us | Latest Sites in CIMC
Legend
Sites
Incidents of National Significance
Federal Facility Docket/Superfund NPL/RCRA
Federal Facility Docket/Brownfields/RCRA
RCRA Corrective Action/Superfund NPL
RCRA Corrective Action/Superfund Non-NPL
Federal Facility Docket/Superfund NPL
Federal Facility Docket/Superfund Non-NPL
Federal Facility Docket/Superfund Non-NPL/RCRA CA
Federal Facility Docket/RCRA CA
Brownfields Properties/RCRA CA
Brownfields/RCRA CA/Superfund Non-NPL
Federal Facility Docket
Last Updated: 4/7/2024
0.3 mi
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County of Solano, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA | EPA Office of Land and Emergency Mana…
Powered by Esri



Ready | Zoom Level: 14 of 19 (1:24,000) Closest Zoom for Pipelines | (lat,long): 38.402666, -121.905275 | Map Showing Pipelines in: Solano, CA

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Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688

Inquiry Number: 7593477.7
March 15, 2024

EDR Environmental Lien and AUL Search

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EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

270 Browns Valley Parkway
Centennial Park
Vacaville, CA 95688

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found ☐ Not Found ☒

DRAFT

RESEARCH SOURCE

Source 1:

Solano Recorder
Solano, CA

DRAFT

PROPERTY INFORMATION

Deed 1:

Type of Deed:	deed
Title is vested in:	City of Vacaville
Title received from:	Redevelopment Agcy Vacaville
Deed Dated	3/8/2011
Deed Recorded:	6/15/2011
Book:	NA
Page:	na
Volume:	NA
Instrument	06152011
Docket	na
Land Record Comments:	
Miscellaneous Comments:	
Legal Description:	See Exhibit
Legal Current Owner:	City of Vacaville
Parcel # / Property Identifier:	0129220030, 0129220050, 0129220040
Comments:	See Exhibit

Deed 2:

Type of Deed:	deed
Title is vested in:	City of Vacaville
Title received from:	Vacaville Redev Agcy
Deed Dated	3/8/2011
Deed Recorded:	6/15/2011
Book:	NA
Page:	na
Volume:	na
Instrument	na
Docket	NA
Land Record Comments:	
Miscellaneous Comments:	
Legal Description:	See Exhibit
Legal Current Owner:	City of Vacaville
Parcel # / Property Identifier:	0133070300
Comments:	See Exhibit

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Deed Exhibit 1

DRAFT

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL AND, UNLESS OTHERWISE SHOWN BELOW, MAIL TAX STATEMENT TO:

Vacaville Redevelopment Agency
Attention: Cyndi Johnston
40 Eldridge Avenue, Suite 7
Vacaville, CA 94588

Recorded in Official Records, Solano County

Marc C. Tonnesen
Assessor/Recorder

6/15/2011
2:38 PM
AR16
06

P VACAVILLE REDEV. AGENCY

Doc#: 201100053199

Titles: 1 **Pages: 6**

Fees	0.00
Taxes	0.00
Other	0.00
PAID	$0.00

APN: 00129-220-030, 040, 050

Exempt from recording fees pursuant to Government Code 6103

GRANT DEED

The Undersigned Grantor(s) DECLARE(S)
DOCUMENT TRANSFER TAX IS $ **-0-**
City of Vacaville

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

REDEVELOPMENT AGENCY VACAVILLE, a public body, corporate and politic

Does hereby Grant(s) to:

CITY OF VACAVILLE, a municipal corporation

THE LAND DESCRIBED HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF SOLANO, CITY OF VACVILLE, AND IS DESCRIBED AS FOLLOWS:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF FOR FULL LEGAL DESCRIPTION

Dated: March 8, 2011

"GRANTOR"

Laura C. Kuhn

By: Laura C. Kuhn
Its: Executive Director

State of California
County of Solano

On June 14, 2011 before me, Rochelle L. Martin, Notary Public, personally appeared Laura C. Kuhn, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Rochelle L. Martin

ROCHELLE L. MARTIN
Commission # 1872172
Notary Public - California
Solano County
My Comm. Expires Dec 20, 2013

Place Notary Seal Above

DRAFT

EXHIBIT A

LEGAL DESCRIPTION

All of that land in the State of California, County of Solano, City of Vacaville, described as follows:

PARCEL ONE:

Lot 3, as shown on the Map entitled: "ALLISON TRACT NEAR VACAVILLE", which Map was filed in the Recorder's Office of Solano County, December 16, 1885, in Book 1 of Maps, at Page 35.

TOGETHER WITH an easement and right of way for road purposes over the bridge across the Putah South Canal at or near Milepost 11.24, as described in Instrument #59768 in Book 1978, at Page 102603 of Official Records of County of Solano.

APN: 129-220-040

PARCEL TWO:

Lot 2, as on the Map entitled: "ALLISON TRACT NEAR VACAVILLE", which Map was filed in the Recorder's Office of Solano County, December 16, 1885, in Book 1 of Maps, Page 35.

EXCEPTING THEREFROM the property described as follows: A tract of land is the Rancho Los Putos, being a protion of Lots 1 and 2 as said Lots are so designagted on the Map entitled: "MAP OF JOSIAH ALLISON, NEAR VACAVILLE", filed December 16, 1885, in Book 1 of Maps, at Page 35, Records of Solano County, hereinafter described as follows:

BEGINNING at the Northeast center of said Lot 2, running thence from said point of beginning South 00° 42' West 52.4 feet along the Easterly boundary of said Lot 2; thence leaving said boundary North 89° 18' West 60.8 feet; thence South 30° 36' West 607.3 feet; thence South 02' 10' East 315.1 feet to a point hereinafter referred to a point "A", thence continuing South 01° 10' East 120.0 feet to a point hereinafter referred to as point "B"; thence continuing South 02° 10' East 567.3 feet to a point hereinafter referred to a Point "C"; thence continuing South 02° 10' East 60.0 feet to the Southerly boundary of said lot 2; Thence North 89° 18' West along said Southerly Boundary 60.1 feet to a point; thence continuing North 89° 18' West along said Southerly boundary 124.0 feet tot he Northeast corner of Lot 6 of said subdivision; thence leaving said Southerly boundary North 01° 27' East 50.0 feet to a point hereinafter referred to a point "D", thence continuing North 01° 27' East 826.2 feet to a point "E"; Thence continuing North 01° 27' East 79.0 feet to a point hereinafter referred to as point "F"; thence continuing North 01° 27' East 134.0 Feet; Thence North 30° 36' East 635.5 Feet to the Northerly boundary of said Lot 2; Thence South 89° 18' East along said Northerly boundary 63.4 feet to a point; said point is North 89° 18' West 100.0 feet from the point of beginning; thence South 89° 18' East along said Northerly boundary 100.0 feet to the point of beginning.

ALSO EXCEPTING THEREFROM the property described as follows: A tract of land in the Rancho Los Putos, being a portion of Lot 2, as said Lot is so designated on the Map entitled: "MAP OF LAND OF JOSIAH ALLISON, NEAR VACAVILLE", filed December 16, 1885, in Book 1 of Maps, at Page 35, Records of Solano County, said tract is described as follows:

BEGINNING at a point on the Northerly boundary of said Lot 2, which is the NORTHWESTERLY corner of that certain 5.48 acre tract of land described as tract one in the Deed from Edith Mary Harbison, et al, to the United States of America, dated October 12, 1956, and recorded October 25, 1956 in Book 854 of Official Records, at Page 43, Records of Solano County; said point is North 89° 12' West 163.4 feet from the Northeasterly corner of said Lot 2, running thence from said point of beginning South 30° 36' West along the Northwesterly boundary of said 5.48 acre tract 635.5 feet; thence South 01° 27' West along the Westerly boundary of said 5.48 acre tract, 134.0 feet; thence leaving said Westerly boundary South 87° 59' West 12.0 feet along a Northerly boundary of that certain 0.24 acre tract of land described as Tract three in said Deed; thence leaving said Northerly boundary North 01° 27' East 138.2 feet; thence North 30° 36' East 631.4 feet to a point on the aforesaid Northerly boundary of said Lot 2, said point is North 89° 18' West 14.0 feet from the point of beginning; thence South 89° 12' East 14.0 feet along said Northerly boundary to the point of beginning.

FURTHER EXCEPTING THEREFROM the property described as follows: Beginning at a point which bears South 00° 42' West along the Easterly line of Lot 2, as the same is shown on that certain Map entitled: "ALLISON TRACT NEAR VACAVILLE", which Map was filed for record December 16, 1885, in Map Book 1, at Page 35, Solano County Records, 52.4 feet from the Northeasterly corner of said Lot 2, and running thence North 89° 18' West 60.8 feet; thence South 30° 36' West 607.3 feet; thence South 02° 10' East 1062.4 feet to the Southerly line of said Lot 2, Map hereinabove referred to; thence South 89° 12' East along said Southerly line to the Southeasterly corner of said Lot 2; thence North 00° 48' East along the Easterly line of Lot 2, 1587.70 feet to the point of beginning.

TOGETHER WITH an easement and right of way for road purposes over the bridge across the Putah South Canal at or near Milepost 11.24, as described in Instrument #59768, in Book 1978, at Page 102603 of Official Records of County of Solano.

APN: 129-220-040

PARCEL THREE:

Lot 4, as the same is shown on that certain Map entitled: "ALLISON TRACT NEAR VACAVILLE", which Map was filed in the recorder's Office of Solano County, December 16, 1885, in Book 1 of Maps, at Page 35.

TOGETHER WITH an easement and right of way for road purposes over the bridge across the Putah South Canal at or near Milepost 11.24, as described in Instrument #59768 in Book 1978 at Page 102603 of Official Records of County of Solano.

APN: 129-220-030

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EXHIBIT A CONTINUED

REAL PROPERTY in the City of Vacaville, County of Solano, State of California, described as follows:

PARCEL 1:

Being Lot No. (5) Five as laid down on a Map of the Lands of Josiah Allison Near Vacaville, said Map made by E.N. Eager, C.E., December 15, 1884, and on file in the Office of the Recorder of Solano County. Said Lot 5 containing 32.39 acres of land and being the same land conveyed by Josiah Allison to Q.H. Allison by Deed dated December 23rd 1884, and recorded December 16th, 1885, Book of Deeds 93 at Page 130, Records of Solano County; excepting from the said Lot 5 a strip of land across the southeast corner, or side of said Lot 5, thirty (30) feet wide and about 1.08 chains in length, Deeded to Alleyne Rogers on or about the 12th day of June, 1907, by said Q.H. Allison. Said 30 foot strip of land being bounded on the South by lands of J. Allison as shown on said Map herein above referred to.

PARCEL 2:

Being a portion of Lot 6 in Josiah Allison Subdivision Near Vacaville, Solano County, California, a Map of which is recorded in the Office of the Solano County Recorder in Book 1 of Maps at Page 35 and being further described as follows:

Beginning at the northwest corner of said Lot 6; thence, along the West line of said Lot South 0° 48' 08" West, 721.52 feet; thence, North 69° 13' 57" East, 1111.40 feet to the East line of said Lot; thence, along the East line of said Lot, North 0° 48' 00" East 314.29 feet to the North line of said Lot; thence, along the North line of said Lot North 89° 16' 23" West 1033.56 feet to the point of beginning.

PARCEL 3:

Lot Six (6) as the same is shown on Map entitled: "Map of Lands of Josiah Allison Near Vacaville, Solano County, California", made by E.N. Eager, Surveyor, December 15, 1884, and recorded in the Recorder's Office of Solano County, December 16, 1885, in Book 1 of Maps, Page 35. Also a strip of land thirty feet wide along the southeast side of Lot 5 of the above described subdivision to the southwest corner of said Lot 5, about a distance of 1.08 chains;

EXCEPTING THEREFROM:

That portion of said Parcel of land heretofore conveyed to the City of Vacaville by Deed executed by Joe Cruces, Jr., and Mary M. Cruces, dated August 11, 1948, and recorded November 17, 1948 in Book 457 at Page 401 - Instrument No. 11849, Official Records of Solano County, California.

APN: 129-220-050

Brown Street Sewage Treatment

RESOLUTION NO. RD-2011-3

RESOLUTION OF THE REDEVELOPMENT AGENCY TRANSFERRING PROPERTIES TO THE CITY OF VACAVILLE

WHEREAS, the City of Vacaville, ("City") is a California general law city and municipal corporation and the "community" as that term is defined by the Health and Safety Code Section 33002; and

WHEREAS, the City Council of the City ("City Council") has adopted, and the Redevelopment Agency ("Agency") is responsible for implementing the Redevelopment Plan for the I-505/80 Redevelopment Project Area adopted by the City Council by Ordinance No. 1188 on July 12, 1983, ("I-505/80 Redevelopment Plan") and as hereafter amended from time to time pursuant to Health and Safety Code Section 33000, et seq.; and

WHEREAS, the City Council has adopted, and the Agency is responsible for implementing the Redevelopment Plan for the Vacaville Community Redevelopment Project Area, adopted by the City Council by Ordinance No. 1164 on June 28, 1982 ("VCRA Redevelopment Plan"), and as hereafter amended from time to time pursuant to Health and Safety Code Section 33000; and

WHEREAS, to assist in the implementing of the I-505/80 Redevelopment Plan and VCRA Redevelopment Plan, the Agency, on December 8, 2009, adopted a five-year Implementation Plan ("Implementation Plan") pursuant to Section 33490 of the Health and Safety Code; and

WHEREAS, from the inception of the Agency and the adoption of the I-505/80 Redevelopment Plan and VCRA Redevelopment Plan, as amended from time to time, Redevelopment Law has provided that upon dissolution of the Agency, all assets of the Agency shall belong to the City; and

WHEREAS, the respective terms of the redevelopment project areas were not contested by members of the public and were validated as a matter of law pursuant to Health and Safety Code section 33000 et seq. and Code of Civil Procedure, Section 860 et seq.; and

WHEREAS, all acquisitions and transfers of real property by whatever method by and/or between the City and Agency were made in reliance upon then existing law for the benefit of the City; and

WHEREAS, the Agency has assembled assets including, but not limited, to real property under existing laws; and

WHEREAS, the Agency-owned public facilities and properties are identified in Attachment 1 and Attachment 2 (collectively "Agency-Owned Property"); and

WHEREAS, the Agency is transferring Agency-Owned Property to the City pursuant to Health and Safety Code Section 33430, et seq.; and

WHEREAS, the City intends to accept the property and agrees to use, or continue using, the property to further the redevelopment purpose for which it was obtained by the Agency, up to and including the effective date of any amendment, repeal, or modification of the Redevelopment Law occurring after March 8, 2011; and

WHEREAS, the transfer of the Agency-Owned Property held by the Agency to the City is exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to

CEQA Guidelines Section 15061(b)(3) by the general rule that CEQA applies only to projects that have the potential to cause significant effect on the environment; and

WHEREAS, a joint public meeting of the City Council and Agency Board of Directors with respect to the real property transfer of Agency-Owned Property was duly held in accordance with applicable law.

NOW, THEREFORE, BE IT RESOLVED, the transfer of real property identified in Attachment 1 will ensure that the City has control of and ensures the property remains in public use, or that use of the property remains in conformity with the Redevelopment Plans.

BE IT FURTHER RESOLVED, that the transfer of real property identified in Attachment 2 will ensure that the property remains as affordable housing in conformity with the Redevelopment Plans.

BE IT FURTHER RESOLVED, that the Agency hereby approves and authorizes:

1. The transfer of the Agency-Owned Properties to the City;

2. The execution by the Executive Director of all grant deeds in substantially the form on file with the City Clerk and the Agency Secretary, with such changes as are approved by the Agency signatory (such approval to be conclusively evidenced by the execution of the documents);

3. The Executive Director, or the Executive Director's designee, to prepare, or have prepared by the City Attorney, the appropriate legal documents, including the final grant deeds necessary to transfer the Agency- Owned property to the City.

BE IT FURTHER RESOLVED, that the Agency hereby designates the Agency Secretary as the custodian of the documents and other material, which constitute the record of proceedings upon which the decision herein is based. These documents may be found at the Agency Secretary's Office at 650 Merchant Street, Vacaville, California, 95688.

BE IT FURTHER RESOLVED, that this Resolution shall take immediate effect from and after its passage.

PASSED, ADOPTED AND APPROVED, by the Vacaville Redevelopment Agency at a special meeting thereof this 8th day of March 2011.

I, Michelle A. Thornbrugh, Agency Secretary of the Vacaville Redevelopment Agency, do hereby certify under penalty of perjury that the foregoing Resolution No. RD 2011-3 was duly adopted by the Agency at a meeting of said Board on the 8th day of March, and that it was so adopted by the following vote:

AYES: Agency members, Harris, Hunt, Mashburn, Vice-Chair Rowlett and Chair Hardy

NOES: None

ABSENT: None

ATTEST:

By: _____
Michelle A. Thornbrugh, Agency Secretary

END OF DOCUMENT

I hereby certify that the foregoing instrument is a true copy of the original instrument on file in my office.

_____
City Clerk of the City of Vacaville, California

DRAFT

Deed Exhibit 2

DRAFT

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL AND, UNLESS OTHERWISE SHOWN BELOW, MAIL TAX STATEMENT TO:

Vacaville Redevelopment Agency
Attention: Cyndi Johnston
40 Eldridge Avenue, Suite 7
Vacaville, CA 94588

Recorded in Official Records, Solano County

Marc C. Tonnesen
Assessor/Recorder

P VACAVILLE REDEV. AGENCY

Doc#: 201100053202

6/15/2011
2:38 PM
AR16
06

Titles: 1 **Pages: 4**

Fees	0.00
Taxes	0.00
Other	0.00
PAID	$0.00

APN: 0133-070-300

Exempt from recording fees pursuant to Government Code 6103

GRANT DEED

The Undersigned Grantor(s) DECLARE(S)

DOCUMENT TRANSFER TAX IS $ **-0-**
City of Vacaville

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

VACAVILLE REDEVELOPMENT AGENCY, a public body, corporate and politic

Does hereby Grant(s) to:

CITY OF VACAVILLE, a municipal corporation

THE LAND DESCRIBED HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF SOLANO, CITY OF VACVILLE, AND IS DESCRIBED AS FOLLOWS:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF FOR FULL LEGAL DESCRIPTION

Dated: March 8, 2011

"GRANTOR"

Laura C. Kuhn

By: Laura C. Kuhn
Its: Executive Director

State of California
County of Solano

On June 14, 2011 before me, Rochelle L. Martin, Notary Public, personally appeared Laura C. Kuhn, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Rochelle L. Martin

ROCHELLE L. MARTIN
Commission # 1872172
Notary Public - California
Solano County
My Comm. Expires Dec 20, 2013

Place Notary Seal Above

DRAFT

EXHIBIT A

LEGAL DESCRIPTION

The surveyed remainder future Units, as the same is shown on that certain Map entitled, "Parcel Map of Kirkpatrick Property – Phase 1, being the land shown in Book 15, Surveys, Page 987, City of Vacaville, County of Solano, State of California", which Map was filed for record in the Office of the Recorder of the County of Solano County, California, on May 17, 1985, in Book 28 of Parcel Maps, at Page 16.

APN: 0133-070-300

SPRR - Allison Pkwy

DRAFT

RESOLUTION NO. RD-2011-3

RESOLUTION OF THE REDEVELOPMENT AGENCY TRANSFERRING PROPERTIES TO THE CITY OF VACAVILLE

WHEREAS, the City of Vacaville, ("City") is a California general law city and municipal corporation and the "community" as that term is defined by the Health and Safety Code Section 33002; and

WHEREAS, the City Council of the City ("City Council") has adopted, and the Redevelopment Agency ("Agency") is responsible for implementing the Redevelopment Plan for the I-505/80 Redevelopment Project Area adopted by the City Council by Ordinance No. 1188 on July 12, 1983, ("I-505/80 Redevelopment Plan") and as hereafter amended from time to time pursuant to Health and Safety Code Section 33000, et seq.; and

WHEREAS, the City Council has adopted, and the Agency is responsible for implementing the Redevelopment Plan for the Vacaville Community Redevelopment Project Area, adopted by the City Council by Ordinance No. 1164 on June 28, 1982 ("VCRA Redevelopment Plan"), and as hereafter amended from time to time pursuant to Health and Safety Code Section 33000; and

WHEREAS, to assist in the implementing of the I-505/80 Redevelopment Plan and VCRA Redevelopment Plan, the Agency, on December 8, 2009, adopted a five-year Implementation Plan ("Implementation Plan") pursuant to Section 33490 of the Health and Safety Code; and

WHEREAS, from the inception of the Agency and the adoption of the I-505/80 Redevelopment Plan and VCRA Redevelopment Plan, as amended from time to time, Redevelopment Law has provided that upon dissolution of the Agency, all assets of the Agency shall belong to the City; and

WHEREAS, the respective terms of the redevelopment project areas were not contested by members of the public and were validated as a matter of law pursuant to Health and Safety Code section 33000 et seq. and Code of Civil Procedure, Section 860 et seq.; and

WHEREAS, all acquisitions and transfers of real property by whatever method by and/or between the City and Agency were made in reliance upon then existing law for the benefit of the City; and

WHEREAS, the Agency has assembled assets including, but not limited, to real property under existing laws; and

WHEREAS, the Agency-owned public facilities and properties are identified in Attachment 1 and Attachment 2 (collectively "Agency-Owned Property"); and

WHEREAS, the Agency is transferring Agency-Owned Property to the City pursuant to Health and Safety Code Section 33430, et seq.; and

WHEREAS, the City intends to accept the property and agrees to use, or continue using, the property to further the redevelopment purpose for which it was obtained by the Agency, up to and including the effective date of any amendment, repeal, or modification of the Redevelopment Law occurring after March 8, 2011; and

WHEREAS, the transfer of the Agency-Owned Property held by the Agency to the City is exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to

CEQA Guidelines Section 15061(b)(3) by the general rule that CEQA applies only to projects that have the potential to cause significant effect on the environment; and

WHEREAS, a joint public meeting of the City Council and Agency Board of Directors with respect to the real property transfer of Agency-Owned Property was duly held in accordance with applicable law.

NOW, THEREFORE, BE IT RESOLVED, the transfer of real property identified in Attachment 1 will ensure that the City has control of and ensures the property remains in public use, or that use of the property remains in conformity with the Redevelopment Plans.

BE IT FURTHER RESOLVED, that the transfer of real property identified in Attachment 2 will ensure that the property remains as affordable housing in conformity with the Redevelopment Plans.

BE IT FURTHER RESOLVED, that the Agency hereby approves and authorizes:

1. The transfer of the Agency-Owned Properties to the City;

2. The execution by the Executive Director of all grant deeds in substantially the form on file with the City Clerk and the Agency Secretary, with such changes as are approved by the Agency signatory (such approval to be conclusively evidenced by the execution of the documents);

3. The Executive Director, or the Executive Director's designee, to prepare, or have prepared by the City Attorney, the appropriate legal documents, including the final grant deeds necessary to transfer the Agency- Owned property to the City.

BE IT FURTHER RESOLVED, that the Agency hereby designates the Agency Secretary as the custodian of the documents and other material, which constitute the record of proceedings upon which the decision herein is based. These documents may be found at the Agency Secretary's Office at 650 Merchant Street, Vacaville, California, 95688.

BE IT FURTHER RESOLVED, that this Resolution shall take immediate effect from and after its passage.

PASSED, ADOPTED AND APPROVED, by the Vacaville Redevelopment Agency at a special meeting thereof this 8th day of March 2011.

I, Michelle A. Thornbrugh, Agency Secretary of the Vacaville Redevelopment Agency, do hereby certify under penalty of perjury that the foregoing Resolution No. RD 2011-3 was duly adopted by the Agency at a meeting of said Board on the 8th day of March, and that it was so adopted by the following vote:

AYES: Agency members, Harris, Hunt, Mashburn, Vice-Chair Rowlett and Chair Hardy

NOES: None

ABSENT: None

ATTEST:

By: _____
Michelle A. Thornbrugh, Agency Secretary

END OF DOCUMENT

I hereby certify that the foregoing instrument is a true copy of the original instrument on file in my office.

_____
City Clerk of the City of Vacaville, California

DRAFT

Transmittal

KLEINFELDER
An employee owned company

To Tawnia Skow
City of Vacaville Public Works
650 Merchant Street
Vacaville, CA 95688

Date: February 5, 2001
Files: 40-343101
Copies:

Subject: **Brown Street Landfill**

We are sending the following: ☒ **Attached** ☐ **Under separate cover**

Revised text for the Brown Street Landfill Closure Certification Report.

RECEIVED
FEB 06 2001
PUBLIC WORKS
ENGINEERING SVC

Via:
- ☐ Messenger
- ☐ First Class Mail
- ☐ Air
- ☒ Fed Ex
- ☐ United Parcel
- ☐ Cal Overnite
- ☐ Air Freight
- ☐ _____

Remarks:

Transmitted:
- ☒ As Requested
- ☐ For Approval
- ☐ For Your Use
- ☐ For Review & Comment

By _____
Timothy Crandall, PE
Senior Engineer

40-343101\2311T027
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ESTABLISHED 1850

CITY OF VACAVILLE
650 Merchant Street, Vacaville California 95688

LETTER OF TRANSMITTAL

DATE: February 9, 2001

TO: Central Valley RWQCB
3443 Routier Road, Suite A
Sacramento, CA 95827
Attention: Mr. John D. Moody, P.E.

SUBJECT: **Brown Street Landfill - Revised Closure Certification Report**

FILE: #354

The following items are being transmitted to you:

Copies	Date	No.	Description
1	February 5, 2001	40-3431-02	Revised text for the, "*Closure Certification Report, Inactive Brown Street Landfill Closure Project,*" prepared by Kleinfelder, Inc.

☐Information/Use ☐Review/Comment ☒Approval ☐Signature ☒As Requested
☐Correction ☐Permit

REMARKS:

Following is the revised text for the Closure Certification Report for the above referenced project. Please replace the cover and pages i through iv and 1 through 12 of the original report (dated February 16, 2000) with the revised cover and pages i through iv and 1 through 15 (dated February 5, 2001).

Revisions were made by Kleinfelder, Inc. based on verbal comments received from you on November 1, 2000 after your review of the original report. Please review the revised report and get back to me with any comments. The City of Vacaville is very interested in obtaining final closure of the site.

Feel free to call me at (707) 449-5340 if you have any questions or need any additional information.

Sincerely,

Tawnia M. Skow

TAWNIA M. SKOW, P.E.
Assistant Engineer

Attachments

\\CHTMFP03\CIP\Cip\300'S\354\CONST\Moody trans (revised closure rpt).doc

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Closure Certification Report

for the Inactive Brown Street Landfill

Centennial Park
Vacaville, California

February 5, 2001

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23y40001.fh8

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Closure Certification Report

for the Inactive Brown Street Landfill

Centennial Park
Vacaville, California

February 5, 2001

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Closure Certification Report

for the Inactive Brown Street Landfill

Centennial Park
Vacaville, California

February 5, 2001

DRAFT

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CLOSURE CERTIFICATION REPORT
INACTIVE BROWN STREET LANDFILL CLOSURE PROJECT
CITY OF VACAVILLE, SOLANO COUNTY, CALIFORNIA

February 5, 2001

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A Report Prepared for:

City of Vacaville
650 Merchant Street
Vacaville, California 95688

CLOSURE CERTIFICATION REPORT
INACTIVE BROWN STREET LANDFILL CLOSURE PROJECT
CITY OF VACAVILLE, SOLANO COUNTY, CALIFORNIA

Kleinfelder Job No. 40-3431-02

Prepared by:

Timothy Crandall, P.E.
Construction Quality Assurance Officer

KLEINFELDER, INC.
780 Chadbourne Road, Suite D
Fairfield, California

February 5, 2001

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2 Sand Cone Results Summary

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A Laboratory test results, conformance testing
B Figures

1 Boring Location Map
2 Landfill Gas Probe Well Construction Diagram
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4 Cross Section A-A'
5-7 Site Photographs
8 Groundwater Contour Map

C Analytical Laboratory Data Sheets
D Unified Soil Classification/Log Key and Boring Logs
E As-Builts (not included, provided under separate cover)

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1 INTRODUCTION AND BACKGROUND

1.1. PURPOSE OF REPORT

This report documents the results of construction quality assurance (CQA) observation and testing activities conducted during closure of the Brown Street Landfill in the City of Vacaville, Solano County California. The CQA observation and testing was conducted according to a CQA plan (dated September 3, 1999), that was prepared specifically for this project. This report also contains a certification stating that the facility was closed in accordance with the project plans and specifications.

1.2. PROJECT DESCRIPTION

The Brown Street Landfill is located in Solano County within Centennial Park in the City of Vacaville, Solano County, California. Historical records indicate that the landfill operated as an open burn site, from an unknown beginning date (early 1930's) until 1957-58, and stopped accepting waste in 1966. Prior to closure, the landfill occupied an area of 6.62 acres and averaged less than 10 feet in thickness.

A Final Closure Design Report for the project was prepared in April 1999 and was approved by the Central Valley Regional Water Quality Control, Solano County Department of Environmental Management, and California Integrated Waste Management Board in June 1999. Construction plans and specifications for the project were prepared by the City of Vacaville and completed on July 7, 1999.

Closure of the landfill consisted of the following tasks:

- Preparation of existing landfill surface for design grade contours
- Removing existing onsite vegetation, including various large trees
- Final soil cover construction, (2-foot thick clay cap consisting of 1-foot barrier layer and 1-foot vegetative layer)
- Installation of one new ground water monitoring well

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- Installation of three new gas monitoring wells
- Elevation adjustments to existing groundwater monitoring wells and gas monitoring wells
- Installation of limited drip irrigation system
- Installation of landscape materials and hydroseeding for erosion control

1.3. PROJECT PARTICIPANTS

The following individuals or companies participated in the construction activities at the Brown Street Landfill:

Position/Role	Name	Company
CQA Monitor	Roque Villareal	City of Vacaville
CQA Monitor	Art Gomez	Kleinfelder
CQA Officer	Tim Crandall	Kleinfelder
Contractor	-	Yubacon
Design Engineer	Tawnia Skow	City of Vacaville
Owner		City of Vacaville

1.4. SUMMARY OF CONSTRUCTION AND INSPECTION ACTIVITIES

The following table summarizes major construction activities and milestones.

Time Span	Activities
8/26/99	Pre-construction meeting
9/20/99	Site mobilization
9/28/99	Construction kickoff meeting, start grading existing landfill surface
9/28/99	Grading existing landfill surface
9/28/99	Grading existing landfill surface
10/20/99	Grading existing landfill surface
10/20/99	Start placing clay soil from borrow area and compacting
10/21/99	Placement of clay soil from borrow area and compacting
11/22/99	Placement of clay soil from borrow area and compacting
11/29/99	Placement of clay soil from borrow area and compacting
12/5/99	Installation of new groundwater monitoring well
11/29/99	Installation of new gas monitoring wells
11/15/99	Installation of limited drip irrigation system
12/29/99	Completion of vegetative layer placement including topsoil layer
1/5/00	Hydroseeding of topsoil

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Appendix B contains the photographic log of the construction activities.

1.5. SUMMARY OF SIGNIFICANT DESIGN CHANGES MADE DURING CONSTRUCTION

Major elements of the closure were unchanged from the final project plans and specifications. Field adjustments and modifications were made in the following areas:

- Minor changes in the alignment of the V-ditch constructed near the toe of the slope along the west boundary of the landfill to keep the drainage ditch outside of the landfill material and facilitate proper drainage.
- Minor changes in the hydroseed grass mix to facilitate rapid growth during winter months and increase erosion protection.

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2 CONSTRUCTION QUALITY ASSURANCE RESULTS

2.1. FIELD TESTING PROCEDURES

Field-testing consisted of measurements of soil density and moisture content using a nuclear density gage and measurement of layer thickness. Density and moisture content measurements were run in accordance with ASTM D 1557 and ASTM D 2922. Layer thickness measurements were accomplished by making hand measurement of the two-component top layer thickness relative to adjacent grade staking.

Barrier layer permeability samples were collected from the borrow materials placed within the fill layer. Once collected, the samples were sealed and sent to Sierra Testing Laboratories for analysis. Results from these procedures are located in Appendix A.

Samples of the borrow material soils were also sampled for moisture (ASTM D2216), particle size analysis (ASTM D422), Atterberg Limits (ASTM D4318), and soil classification (ASTM D2487) for conformance testing. Testing results are shown on the tables and plates accompanying this report.

Approximately 21,000 cubic yards of soil were used in constructing the two-foot thick final cap. The CQA plan stated that conformance testing (testing of material used in cap for physical properties) should occur at a rate of one test per 5,000 cubic yards of final cap soil placed. Field density testing was specified in the CQA plan to occur at a rate of one test per 500 cubic yards of final cap soil placed with one sand cone test per every ten nuclear density tests. Compaction requirements for the final cap were 90% relative compaction at 1% to 3% wet of optimum.

2.2. EARTHFILL COMPACTION TESTING AND OBSERVATIONS

2.2.1. Foundation Layer

The existing soil cover was regraded and compacted to form a stable foundation for construction of the final cover. Twenty six field density tests were conducted (test results 1 through 26, Table 1). All of these tests (with one exception) met the required 90% level of compaction. The thickness of the foundation layer is estimated to range from one foot thick to three feet thick

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based on the elevations specified for rough grading. This thickness of soil coupled with the 90% density provided an adequate foundation for construction of the final cover.

2.2.2. Final Cover

Construction of the final cap occurred by placing loose lifts of soil (8" to 12") and then compacting to form the two-foot thick final cap. The first foot of soil is the barrier layer and the second foot of soil is the vegetative layer. The source of soil for both layers was the borrow site adjacent to the landfill. Soil obtained from the borrow site was transported directly to the landfill and placed and compacted. There was no special segregation of soils from the borrow area for use exclusively in either the barrier layer or vegetative layer since all the material met the requirement of $1x10^{-6}$ cm/sec standard for barrier layer soils.

Field compaction testing was conducted in both layers of the final cap. A total of 101 field density tests (including both nuclear and sand cone density tests) were run during construction of the final cap. Approximately 50% of the field density tests were completed in the barrier layer and 50% in the vegetative layer. Results of the field compaction testing is summarized in Tables 1 and 2. The frequency of field density testing met and exceeded the CQA plan requirement of 1 test/500 cubic yards of final cap soil. The compaction standard of 90% was also met. Five different compaction curves were used to calibrate the nuclear density results. These curves are shown on Plates 5 through 9. Location of each compaction test (X, Y, and Z) are shown on Table 1. The stationing is defined in the design plans for the project. The elevations shown in the table are relative to either the rough grading plan sheet or the finish grading plan sheet in the project plan set. For instance, a density test taken on the final cover at a +1 elevation means that one foot of soil had been placed at that point before the test was taken.

2.3. OTHER TESTING AND INSPECTION

2.3.1. Sand Cone Testing

Sand cone test results are summarized in Table 2. The sand cone results corresponded well with nuclear density test results. The number of sand cone tests made met the CQA requirement of one sand cone test for every ten nuclear density tests. The location of each sand cone test is shown in Table 2 using the stationing presented in the project plans.

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2.3.2. Conformance Testing

Five bulk soil samples were collected for conformance testing. These samples were tested for moisture, particle size, Atterberg limits, hydraulic conductivity, soil classification, and moisture-density relationships. Information on the samples is summarized in the following table.

Sample #	Collection Date	Location
5706	10/21/99	Sample collected from borrow area
5718	11/2/99	5+20 W and 11+60 N
5721	11/3/99	3+50 W and 12+0 N
5723	11/5/99	2+75 W and 13+05 N
5724	11/9/99	7+15 W and 11+50 N

The samples collected were bulk samples that were compacted to 90% in the laboratory and then tested for hydraulic conductivity. Hydraulic conductivity testing of field compacted soils was not required by the regulatory agencies for this project. The number of conformance tests taken satisfies the CQA plan requirement of one test per 5000 cubic yards. Atterberg limit results are summarized on Plate 1. Particle size results are shown on Plates 2 and 3. Moisture contents are summarized on Plate 4. Moisture-density relationships are shown on Plates 5 through 9. Results of hydraulic conductivity testing are summarized in Appendix A. These tests document the physical properties of the soil used in construction of the final cap.

2.4. TWO COMPONENT TOP LAYER THICKNESS EVALUATION

Thickness of the two component top layer was measured by the CQA Monitor during placement. Layer thickness' were found to be in conformance with the project specification of 24 inches.

2.5. ADDITIONAL IRON SAMPLING

Kleinfelder collected 2 bulk samples from the base and perimeter of the landfill for iron analyses. One sample (110741) was collected from Section Cut of -5^{07}, and the other sample (110742) was collected from Section Cut -4^{20}. Samples were collected during construction and submitted for total and DI WET for iron by EPA Method 6010.

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Results of the analyses indicated concentrations of total iron at 37,600 mg/kg (110741) and 38,500 mg/kg (110742). Results of the DI WET analyses indicated concentrations of iron at 2.25 mg/l (110741) and 0.852 mg/l (110742). Copies of the analytical laboratory data sheets are presented in Appendix C.

2.6. INSTALLATION AND SAMPLING OF ADDITIONAL GAS PROBES

Three additional landfill gas probes (GP-7, GP-8 and GP-9) were installed using a drill rig equipped with hollow stem augers. Figure 1 shows the boring location map. Each probe was installed to a total depth of 15 feet below grade (bg) and screened from 5 to 15 feet below grade. The borehole annulus was backfilled with #2/12 Monterey sand from 3 to 15 feet below grade and a 1 foot bentonite plug was installed from 2 to 3 feet below grade. The remainder of the annulus was backfilled with cement/bentonite slurry. Figure 2 shows the typical well construction diagram for the landfill gas probes.

One gas vapor sample was collected from each new LFGP installed. Samples were collected according to the following protocol:

- The top end cap was replaced with a tight fitting cap equipped with a brass barbed fitting.
- The Teflon tubing was attached to the fitting and the other end attached to the sample pump.
- Approximately 2-3 well volumes were purged using the sample pump and flow meter.
- A 1-liter SUMMA canister was then be attached to the Teflon tubing and opened to collect the sample. Since the SUMMA canister is under a vacuum, the sample was drawn into the canister upon opening the canister valve.

Soil gas samples were submitted under Chain of Custody to Air Toxics Ltd. in Sacramento, California for the following analyses:

- Oxygen (O_2)
- Nitrogen (N_2)
- Carbon Monoxide (CO)
- Carbon dioxide (CO_2)
- Methane (CH_4)

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2.6.1. Landfill Gas Probe Sample Results

Results of the landfill gas probe analyses are summarized in the following table:

Table 1
Summary of Landfill Gas Probe Results
(Results in %)

Well Number	Sample Number	Oxygen (O_2)	Nitrogen (N_2)	Carbon Monoxide (CO)	Methane (CH_4)	Carbon Dioxide (CO_2)
GP-7	110560	20	80	Not Detected	Not Detected	0.16
GP-8	110561	20	80	Not Detected	Not Detected	0.11
GP-9	110562	20	80	Not Detected	Not Detected	0.042

Copies of the analytical laboratory data sheets are presented in Appendix C.

2.7. INSTALLATION OF NEW GROUNDWATER MONITORING WELL

On December 9, 1999, Kleinfelder drilled and installed 1 monitoring well (B-2b) to replace the existing well B-2, which is dry. This monitoring well was constructed using 2-inch PVC and screened approximately 10 foot above and 10 feet below first groundwater. The monitoring well was installed using a truck mounted drill rig equipped with 8-inch hollow stem augers. During the drilling and installation, an experienced environmental geologist was on site to log and classify the soil types. Plate D-1, in Appendix D, presents the Unified Soil Classification and Log Key and plate D-2 presents the boring log and well construction details. Additionally, two soil samples were collected from depths of 10 feet and 50 feet below grade and submitted for total and DI WET iron analyses. The results of the analyses indicated total iron concentrations in the 10 and 50-foot samples were 13,700 mg/kg and 17,900 mg/kg, respectively. The results of the DI WET analyses indicated concentrations of 2.57 mg/l (10-foot sample) and 3.39 mg/l (50-foot sample).

Well Construction details for monitoring well B-2b are presented in Figure 3 and summarized are as follows:

- The well casing is 2-inch inside diameter, flush threaded joint, Schedule 40 PVC pipe.
- The well was constructed in an 8-inch diameter borehole.

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- Well screen section was perforated with 0.020-inch factory-cut slots.
- The well was screened from 10 feet above to 10 feet below first groundwater.
- The annular space between the screen and the wall of the boring was backfilled with #2/12 Monterey sand to approximately 2 feet above the top of the perforated sections.
- A 2-foot bentonite plug was placed above the sand pack to provide a seal against surface water infiltration.
- The remaining annular space was filled to the surface with cement/bentonite grout.
- The well was secured in a cement utility box set flush to the ground surface located in a traffic area.

During the drilling of B-2b, groundwater was encountered at a depth of approximately 89 feet below ground surface. Static water level was subsequently measured at 74.9 feet below ground surface.

2.7.1. Subsurface Geology

The stratigraphy encountered in well B-2b consisted of alternating units of silty clay, sandy silt, silty sand and sand. Generally, the aquifer material consisted of yellow-brown silt underlain by a yellow-brown sandy silt at 95 feet. A red-brown sand was encountered at a depth of 100 to 105 feet below grade (bg). The geology from well B-2b was compared with the bore logs from existing monitoring wells B-1, B-2 and B-3. Figure 4 presents a geologic cross section through wells B-2b and B-1.

2.7.2. Well Development

On December 15, 1999, well development activities were conducted on B-2b. The well was first bailed to remove sediment from the water. The well screen was then surged for approximately 25 minutes and then bailed again to remove the sediment. Development continued using a submersible pump and pumped at a rate of approximately 1.5 gallons per minute. Approximately 27 gallons of water were pumped from the well.

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- Nickel by Method 7520
- Selenium by Method 7741
- Thallium by Method 7841
- Cyanide by Method 9010
- Sulfide by Method 9030
- Dissolved Iron by Method 6010

Groundwater samples were not collected from existing wells B-2 or B-3, as these wells were dry. Existing monitoring well B-1 had a measured depth to water level of 92.35 feet below top of well casing. This well was not sampled on this date, however, due to the protrusion of three screws into the well casing. These screws were reportedly installed as part of the well casing modifications conducted by the City. The protrusion of these screws into the well casing prohibited the 1.5-inch diameter bailer from being lowered into the well casing. On January 10, 2000, a second attempt was made to sample B-1 using a 1-inch diameter, stainless steel bailer. The sampling line attached to the bailer was subsequently cut by the screws, and the bailer was temporarily lost down the well casing. Efforts to retrieve the bailer were successful, however, due to the protrusion of the screws, further efforts to sample the well were abandoned until such time that the screws can either be removed or cut off. The City has since resolved this issue by cutting off the protruding screws. This will allow for on-going sampling.

On January 20, 2000, Kleinfelder sampled monitoring well B-1.

2.8.3. Groundwater Sampling Results

Analytical test results did not indicate concentrations of volatile organic compounds or semi-volatile organic compounds above laboratory reporting limits. Results of the metals analyses are summarized in the following table:

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2.8. COLLECTION AND ANALYIS OF GROUNDWATER SAMPLES

2.8.1. Measurement of Groundwater Levels

Water level measurements were recorded in two monitoring wells (B-1 and B-2b). Water levels were not recorded for monitoring well B-2 and B-3, as these wells were dry. Depth to water was recorded as follows (measured from top of casing):

Table 2
Depth to Water Level Measurements

Well Number	Date	Depth to Water (feet)
B-1	12/2	92.35
B-2	12/2	Dry
B-3	12/2	Dry
B-2b	12/2	74.90

Since only two groundwater levels were measured, an accurate groundwater gradient/flow direction could not be calculated. However, to estimate the groundwater flow direction, January 1999 water level data for B-3 was used to calculate an estimated flow direction Based on this estimate, the groundwater flow direction trends in a Southeasterly direction. Figure 8 presents the groundwater contour plot.

2.8.2. Groundwater Sampling

On December 22, 1999, groundwater samples were collected from the new well B-2b. Samples were collected using clean, disposable Teflon bailers. The depth to water in well B-2b was measured at 74.9 feet prior to purging. Approximately 3 well volumes of water were purged prior to collection of the groundwater sample. During the purging, the pH, temperature and conductivity were measured. The water sample from B-2b was submitted under chain-of-custody to Sequoia Analytical laboratory for the following:

- Volatile Organic Compounds by EPA Method 8260
- Semi-Volatile Organic Compounds by EPA Method 8270
- Metals by EPA 6010 (An, Ba, Be, Cd, Cr, Co, Cu, Ag, Sn, V, Zn)
- Lead by Method 7421
- Mercury by Method 7470

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Table 3
Summary of Metals Analyses

		Results (mg/1)		
Constituent	**Analytical Method**	**B-1**	**B-2b**	**Regulatory Criteria (mg/l)**
Antimony	6010	ND		
Arsenic	**6020**	**ND**		**0.05** [a] Primary MCL
Barium	6010	0.21		1.0 [a]
Beryllium	6010	ND		
Cadmium	6010	ND		
Chromium	6010	0.01		0.05 [a]
Cobalt	6010	ND		
Copper	6010	0.00		1.0 [b]
Lead (total)	7421	0.00		0.05 [a]
Mercury	7470A	ND		
Nickel	**7520 mod.**	**ND**		**0.0154** [b]
Selenium	270.3	0.02		
Silver	6010	ND		
Tin	6010	ND		
Vanadium	6010	ND		24
Zinc	6010	0.02		5.0 [c]
Thallium	7841	ND		
Cyanide	335.2	ND		
Sulfide	376.1	ND		
Iron (dissolved)	**200.7**	**ND**		**0.3** [c] Secondary MCL

[a] Source: 40 CFR, Parts 141, 12, 143, National Primary and Secondary Drinking Water Regulations – US EPA, 1989.

[b] Source: EPA Superfund Public Health Evaluation Manual, October 1986

[c] Source: US EPA – Region IX Drinking Water Branch – "Drinking Water Standards and Health Advisory Table:, June 1989, California Code of Regulations, Title 22:

2.9. SUMMARY OF RESULTS

Results of the groundwater sampling indicated the presence of a number of metals. Arsenic was detected at a concentration slightly above the Maximum Contaminant Level (MCL) of 0.05 mg/l and dissolved iron was above the secondary MCL of 0.3 mg/l.

The results of the soil analyses from the two samples collected from monitoring well B-2b boring indicated total iron concentrations of 13,700 mg/kg (10 foot sample) and 17,900 mg/kg (50 foot sample). The results of the DI WET analyses indicated concentrations of 2.57 mg/l (10 foot sample) and 3.39 mg/l (50 foot sample). By comparison, the soil samples collected from the base of the landfill indicated concentrations of total iron at 37,600 mg/kg (110741) and 38,500 mg/kg (110742). Results of the STLC analyses indicated concentrations of iron at 2.25 mg/l

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(110741) and 0.852 mg/l (110742). Based on these results, the concentrations of iron detected in the soil samples collected from monitoring well B-2b are considered background levels.

Results of the landfill gas probe samples reported concentrations of oxygen (20%), nitrogen (80%) in carbon dioxide (0.042 to 0.11 %) in each of the samples analyzed. Carbon monoxide and methane were not detected in any of the samples analyzed.

2.10. AS-BUILT DRAWINGS

Appendix E contains the as-built drawings for the project prepared by The City of Vacaville. These drawings show the elevations and grades of the as-built clay cap as well as the alignment and elevations of adjacent drainage improvements.

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3 CERTIFICATION STATEMENT

This report was prepared under the direction of the undersigned and contains a summarization of the construction quality assurance activities performed during closure of the Brown Street Landfill in the City of Vacaville, Solano County California. Kleinfelder certifies that the CQA Plan was appropriately implemented and the construction proceeded in accordance with the project plans and technical specifications. The term certification is used herein as defined by Section 8770.6 of the California Business and Professions Code. Kleinfelder performed its services in accordance with the standards that existed in Solano County at the time of the construction activities.

Timothy A. Crandall, P.E.
CQA Officer



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4 LIMITATIONS

The conclusions and observations in this report are based on work performed by Kleinfelder and information provided by The City of Vacaville. This report was prepared in general accordance with the accepted standard of care, which existed in Northern California at the time the construction observation was performed. It should be recognized that interpretation, definition, and evaluation of soil conditions is a difficult and inexact art. Judgments leading to conclusions are generally made with a limited number of tests and observations.

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Transmittal

KLEINFELDER
An employee owned company

To Tawnia Skow
City of Vacaville Public Works
650 Merchant Street
Vacaville, CA 95688

Date: June 6, 2001
Files: 40-343101
Copies:

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Subject: **CQA Report**

We are sending the following: ☒ **Attached** ☐ **Under separate cover**

Two copies of the revised Closure Certification Report, Brown Street Landfill.

Via:
- ☐ Messenger
- ☒ First Class Mail
- ☐ Air
- ☐ Fed Ex
- ☐ United Parcel
- ☐ Cal Overnite
- ☐ Air Freight
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Remarks:

By _____
Timothy Crandall, PE
Senior Engineer

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CLOSURE CERTIFICATION REPORT
INACTIVE BROWN STREET LANDFILL
CLOSURE PROJECT
CITY OF VACAVILLE
SOLANO COUNTY, CALIFORNIA

June 6, 2001

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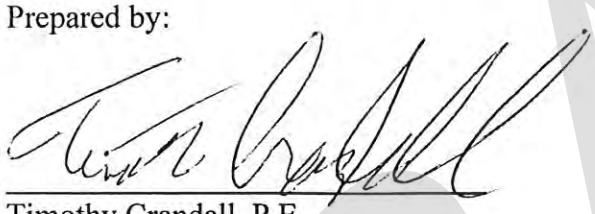
A Report Prepared for:

City of Vacaville
650 Merchant Street
Vacaville, California 95688

CLOSURE CERTIFICATION REPORT
INACTIVE BROWN STREET LANDFILL CLOSURE PROJECT
CITY OF VACAVILLE, SOLANO COUNTY, CALIFORNIA

Kleinfelder Job No. 40-3431-02

Prepared by:



Timothy Crandall, P.E.
Construction Quality Assurance Officer

KLEINFELDER, INC.
780 Chadbourne Road, Suite D
Fairfield, California

June 6, 2001

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8 Groundwater Contour Map

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D Unified Soil Classification/Log Key and Boring Logs
E As-Builts (not included, provided under separate cover)
F Vegetative Layer Documentation

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1 INTRODUCTION AND BACKGROUND

1.1. PURPOSE OF REPORT

This report documents the results of construction quality assurance (CQA) observation and testing activities conducted during closure of the Brown Street Landfill in the City of Vacaville, Solano County California. The CQA observation and testing was conducted according to a CQA plan (dated September 3, 1999), that was prepared specifically for this project. This report also contains a certification stating that the facility was closed in accordance with the project plans and specifications.

1.2. PROJECT DESCRIPTION

The Brown Street Landfill is located in Solano County within Centennial Park in the City of Vacaville, Solano County, California. Historical records indicate that the landfill operated as an open burn site, from an unknown beginning date (early 1930's) until 1957-58, and stopped accepting waste in 1966. Prior to closure, the landfill occupied an area of 6.62 acres and averaged less than 10 feet in thickness.

A Final Closure Design Report for the project was prepared in April 1999 and was approved by the Central Valley Regional Water Quality Control, Solano County Department of Environmental Management, and California Integrated Waste Management Board in June 1999. Construction plans and specifications for the project were prepared by the City of Vacaville and completed on July 7, 1999.

Closure of the landfill consisted of the following tasks:

- Preparation of existing landfill surface for design grade contours
- Removing existing onsite vegetation, including various large trees
- Final soil cover construction, (2-foot thick clay cap consisting of 1-foot barrier layer and 1-foot vegetative layer)
- Installation of one new ground water monitoring well

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- Installation of three new gas monitoring wells
- Elevation adjustments to existing groundwater monitoring wells and gas monitoring wells
- Installation of limited drip irrigation system
- Installation of landscape materials and hydroseeding for erosion control

1.3. PROJECT PARTICIPANTS

The following individuals or companies participated in the construction activities at the Brown Street Landfill:

Position/Role	Name	Company
CQA Monitor	Roque Villareal	City of Vacaville
CQA Monitor	Art Gomez	Kleinfelder
CQA Officer	Tim Crandall	Kleinfelder
Contractor	-	Yubacon
Design Engineer	Tawnia Skow	City of Vacaville
Owner		City of Vacaville

1.4. SUMMARY OF CONSTRUCTION AND INSPECTION ACTIVITIES

The following table summarizes major construction activities and milestones.

Time Span	Activities
8/26/99	Pre-construction meeting
9/20/99	Site mobilization
9/28/99	Construction kickoff meeting, start grading existing landfill surface
9/28/99	Grading existing landfill surface
9/28/99	Grading existing landfill surface
10/20/99	Grading existing landfill surface
10/20/99	Start placing clay soil from borrow area and compacting
10/21/99	Placement of clay soil from borrow area and compacting
11/22/99	Placement of clay soil from borrow area and compacting
11/29/99	Placement of clay soil from borrow area and compacting
12/5/99	Installation of new groundwater monitoring well
11/29/99	Installation of new gas monitoring wells
11/15/99	Installation of limited drip irrigation system
12/29/99	Completion of vegetative layer placement including topsoil layer
1/5/00	Hydroseeding of topsoil

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Appendix B contains the photographic log of the construction activities.

1.5. SUMMARY OF SIGNIFICANT DESIGN CHANGES MADE DURING CONSTRUCTION

Major elements of the closure were unchanged from the final project plans and specifications. Field adjustments and modifications were made in the following areas:

- Minor changes in the alignment of the V-ditch constructed near the toe of the slope along the west boundary of the landfill to keep the drainage ditch outside of the landfill material and facilitate proper drainage.
- Minor changes in the hydroseed grass mix to facilitate rapid growth during winter months and increase erosion protection.

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2 CONSTRUCTION QUALITY ASSURANCE RESULTS

2.1. FIELD TESTING PROCEDURES

Field-testing consisted of measurements of soil density and moisture content using a nuclear density gage and measurement of layer thickness. Density and moisture content measurements were run in accordance with ASTM D 1557 and ASTM D 2922. Layer thickness measurements were accomplished by making hand measurement of the two-component top layer thickness relative to adjacent grade staking.

Barrier layer permeability samples were collected from the borrow materials placed within the fill layer. Once collected, the samples were sealed and sent to Sierra Testing Laboratories for analysis. Results from these procedures are located in Appendix A.

Samples of the borrow material soils were also sampled for moisture (ASTM D2216), particle size analysis (ASTM D422), Atterberg Limits (ASTM D4318), and soil classification (ASTM D2487) for conformance testing. Testing results are shown on the tables and plates accompanying this report.

Approximately 21,000 cubic yards of soil were used in constructing the two-foot thick final cap. The CQA plan stated that conformance testing (testing of material used in cap for physical properties) should occur at a rate of one test per 5,000 cubic yards of final cap soil placed. Field density testing was specified in the CQA plan to occur at a rate of one test per 500 cubic yards of final cap soil placed with one sand cone test per every ten nuclear density tests. Compaction requirements for the final cap were 90% relative compaction at 1% to 3% wet of optimum.

2.2. EARTHFILL COMPACTION TESTING AND OBSERVATIONS

2.2.1. Foundation Layer

The existing soil cover was regraded and compacted to form a stable foundation for construction of the final cover. Twenty six field density tests were conducted (test results 1 through 26, Table 1). All of these tests (with one exception) met the required 90% level of compaction. The thickness of the foundation layer is estimated to range from one foot thick to three feet thick

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based on the elevations specified for rough grading. This thickness of soil coupled with the 90% density provided an adequate foundation for construction of the final cover.

2.2.2. Final Cover

Construction of the final cap occurred by placing loose lifts of soil (8" to 12") and then compacting to form the two-foot thick final cap. The first foot of soil is the barrier layer and the second foot of soil is the vegetative layer. The source of soil for both layers was the borrow site adjacent to the landfill. Soil obtained from the borrow site was transported directly to the landfill and placed and compacted. There was no special segregation of soils from the borrow area for use exclusively in either the barrier layer or vegetative layer since all the material met the requirement of $1x10^{-6}$ cm/sec standard for barrier layer soils.

Field compaction testing was conducted in both layers of the final cap. A total of 101 field density tests (including both nuclear and sand cone density tests) were run during construction of the final cap. Approximately 50% of the field density tests were completed in the barrier layer and 50% in the vegetative layer. Results of the field compaction testing is summarized in Tables 1 and 2. The frequency of field density testing met and exceeded the CQA plan requirement of 1 test/500 cubic yards of final cap soil. The compaction standard of 90% was also met. Five different compaction curves were used to calibrate the nuclear density results. These curves are shown on Plates 5 through 9. Location of each compaction test (X, Y, and Z) are shown on Table 1. The stationing is defined in the design plans for the project. The elevations shown in the table are relative to either the rough grading plan sheet or the finish grading plan sheet in the project plan set. For instance, a density test taken on the final cover at a +1 elevation means that one foot of soil had been placed at that point before the test was taken.

2.3. OTHER TESTING AND INSPECTION

2.3.1. Sand Cone Testing

Sand cone test results are summarized in Table 2. The sand cone results corresponded well with nuclear density test results. The number of sand cone tests made met the CQA requirement of one sand cone test for every ten nuclear density tests. The location of each sand cone test is shown in Table 2 using the stationing presented in the project plans.

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2.3.2. Conformance Testing

Five bulk soil samples were collected for conformance testing. These samples were tested for moisture, particle size, Atterberg limits, hydraulic conductivity, soil classification, and moisture-density relationships. Information on the samples is summarized in the following table.

Sample #	Collection Date	Location
5706	10/21/99	Sample collected from borrow area
5718	11/2/99	5+20 W and 11+60 N
5721	11/3/99	3+50 W and 12+0 N
5723	11/5/99	2+75 W and 13+05 N
5724	11/9/99	7+15 W and 11+50 N

The samples collected were bulk samples that were compacted to 90% in the laboratory and then tested for hydraulic conductivity. Hydraulic conductivity testing of field compacted soils was not required by the regulatory agencies for this project. The number of conformance tests taken satisfies the CQA plan requirement of one test per 5000 cubic yards. Atterberg limit results are summarized on Plate 1. Particle size results are shown on Plates 2 and 3. Moisture contents are summarized on Plate 4. Moisture-density relationships are shown on Plates 5 through 9. Results of hydraulic conductivity testing are summarized in Appendix A. These tests document the physical properties of the soil used in construction of the final cap.

2.4. TWO COMPONENT TOP LAYER THICKNESS EVALUATION

Thickness of the two component top layer was measured by the CQA Monitor during placement. Layer thickness' were found to be in conformance with the project specification of 24 inches.

2.5. VEGETATIVE LAYER

Construction of the vegetative layer involved the following activities:

- Testing soil for agricultural suitability
- Placement of vegetative layer soil
- Nutrient conditioning of vegetative soil
- Installation of vegetation (grasses overall, shrubs in the overlook area)

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A soils analysis (test used to assess the characteristics of a soil relative to it's capability to support plant growth) was run on imported topsoil and existing onsite soil, both of which were used in the vegetative layer. Imported soil was used on the overlook area only. Results of the soils analysis are in Appendix F.

Based on the results of the soil analysis, separate hydroseed designs (mulch, compost, seed, binder) were prepared for the grassland areas and perennial shrub area of the landfill (the perennial shrub area includes the steeper east facing sideslope of the landfill and the flatter area on the southern side, south of the decomposed granite walkway. As explained in Section 1.5, the seed mixture was changed to facilitate rapid growth during winter months and to increase erosion protection. The final mix designs for the grassland seed and perennial shrub seed mixes are included in Appendix F. Placement of the vegetative soils was completed by the end of December, 1999 and hydroseed was completed by 1/5/00.

With the exception of one small area, the vegetative soils are not irrigated. The exception is the overlook area located at the northeast corner of the landfill. Pedestrians can walk to and from the outlook via a decomposed granite pathway that meanders across the surface of the closed landfill. A small drip irrigation system was installed to provide water for shrubs surrounding the lookout area. This system is anticipated to be temporary and will be used for an initial period of three years, the amount of time estimated to establish the vegetation. The City of Vacaville intends to re-evaluate the need for continued irrigation at the end of three years.

2.6. ADDITIONAL IRON SAMPLING

Kleinfelder collected 2 bulk samples from the base and perimeter of the landfill for iron analyses. One sample (110741) was collected from Section Cut of -5^{07}, and the other sample (110742) was collected from Section Cut -4^{20}. Samples were collected during construction and submitted for total and DI WET for iron by EPA Method 6010.

Results of the analyses indicated concentrations of total iron at 37,600 mg/kg (110741) and 38,500 mg/kg (110742). Results of the DI WET analyses indicated concentrations of iron at 2.25 mg/l (110741) and 0.852 mg/l (110742). Copies of the analytical laboratory data sheets are presented in Appendix C.

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2.7. INSTALLATION AND SAMPLING OF ADDITIONAL GAS PROBES

Three additional landfill gas probes (GP-7, GP-8 and GP-9) were installed using a drill rig equipped with hollow stem augers. Figure 1 shows the boring location map. Each probe was installed to a total depth of 15 feet below grade (bg) and screened from 5 to 15 feet below grade. The borehole annulus was backfilled with #2/12 Monterey sand from 3 to 15 feet below grade and a 1 foot bentonite plug was installed from 2 to 3 feet below grade. The remainder of the annulus was backfilled with cement/bentonite slurry. Figure 2 shows the typical well construction diagram for the landfill gas probes.

One gas vapor sample was collected from each new LFGP installed. Samples were collected according to the following protocol:

- The top end cap was replaced with a tight fitting cap equipped with a brass barbed fitting.
- The Teflon tubing was attached to the fitting and the other end attached to the sample pump.
- Approximately 2-3 well volumes were purged using the sample pump and flow meter.
- A 1-liter SUMMA canister was then be attached to the Teflon tubing and opened to collect the sample. Since the SUMMA canister is under a vacuum, the sample was drawn into the canister upon opening the canister valve.

Soil gas samples were submitted under Chain of Custody to Air Toxics Ltd. in Sacramento, California for the following analyses:

- Oxygen (O_2)
- Nitrogen (N_2)
- Carbon Monoxide (CO)
- Carbon dioxide (CO_2)
- Methane (CH_4)

2.7.1. Landfill Gas Probe Sample Results

Results of the landfill gas probe analyses are summarized in the following table:

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Table 1
Summary of Landfill Gas Probe Results
(Results in %)

Well Number	Sample Number	Oxygen (O_2)	Nitrogen (N_2)	Carbon Monoxide (CO)	Methane (CH_4)	Carbon Dioxide (CO_2)
GP-7	110560	20	80	Not Detected	Not Detected	0.16
GP-8	110561	20	80	Not Detected	Not Detected	0.11
GP-9	110562	20	80	Not Detected	Not Detected	0.042

Copies of the analytical laboratory data sheets are presented in Appendix C.

2.8. INSTALLATION OF NEW GROUNDWATER MONITORING WELL

On December 9, 1999, Kleinfelder drilled and installed 1 monitoring well (B-2b) to replace the existing well B-2, which is dry. This monitoring well was constructed using 2-inch PVC and screened approximately 10 foot above and 10 feet below first groundwater. The monitoring well was installed using a truck mounted drill rig equipped with 8-inch hollow stem augers. During the drilling and installation, an experienced environmental geologist was on site to log and classify the soil types. Plate D-1, in Appendix D, presents the Unified Soil Classification and Log Key and plate D-2 presents the boring log and well construction details. Additionally, two soil samples were collected from depths of 10 feet and 50 feet below grade and submitted for total and DI WET iron analyses. The results of the analyses indicated total iron concentrations in the 10 and 50-foot samples were 13,700 mg/kg and 17,900 mg/kg, respectively. The results of the DI WET analyses indicated concentrations of 2.57 mg/l (10-foot sample) and 3.39 mg/l (50-foot sample).

Well Construction details for monitoring well B-2b are presented in Figure 3 and summarized are as follows:

- The well casing is 2-inch inside diameter, flush threaded joint, Schedule 40 PVC pipe.
- The well was constructed in an 8-inch diameter borehole.
- Well screen section was perforated with 0.020-inch factory-cut slots.
- The well was screened from 10 feet above to 10 feet below first groundwater.

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- The annular space between the screen and the wall of the boring was backfilled with #2/12 Monterey sand to approximately 2 feet above the top of the perforated sections.
- A 2-foot bentonite plug was placed above the sand pack to provide a seal against surface water infiltration.
- The remaining annular space was filled to the surface with cement/bentonite grout.
- The well was secured in a cement utility box set flush to the ground surface located in a traffic area.

During the drilling of B-2b, groundwater was encountered at a depth of approximately 89 feet below ground surface. Static water level was subsequently measured at 74.9 feet below ground surface.

2.8.1. Subsurface Geology

The stratigraphy encountered in well B-2b consisted of alternating units of silty clay, sandy silt, silty sand and sand. Generally, the aquifer material consisted of yellow-brown silt underlain by a yellow-brown sandy silt at 95 feet. A red-brown sand was encountered at a depth of 100 to 105 feet below grade (bg). The geology from well B-2b was compared with the bore logs from existing monitoring wells B-1, B-2 and B-3. Figure 4 presents a geologic cross section through wells B-2b and B-1.

2.8.2. Well Development

On December 15, 1999, well development activities were conducted on B-2b. The well was first bailed to remove sediment from the water. The well screen was then surged for approximately 25 minutes and then bailed again to remove the sediment. Development continued using a submersible pump and pumped at a rate of approximately 1.5 gallons per minute. Approximately 27 gallons of water were pumped from the well.

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2.9. COLLECTION AND ANALYIS OF GROUNDWATER SAMPLES

2.9.1. Measurement of Groundwater Levels

Water level measurements were recorded in two monitoring wells (B-1 and B-2b). Water levels were not recorded for monitoring well B-2 and B-3, as these wells were dry. Depth to water was recorded as follows (measured from top of casing):

Table 2
Depth to Water Level Measurements

Well Number	Date	Depth to Water (feet)
B-1	12/2	92.35
B-2	12/2	Dry
B-3	12/2	Dry
B-2b	12/2	74.90

Since only two groundwater levels were measured, an accurate groundwater gradient/flow direction could not be calculated. However, to estimate the groundwater flow direction, January 1999 water level data for B-3 was used to calculate an estimated flow direction Based on this estimate, the groundwater flow direction trends in a Southeasterly direction. Figure 8 presents the groundwater contour plot.

2.9.2. Groundwater Sampling

On December 22, 1999, groundwater samples were collected from the new well B-2b. Samples were collected using clean, disposable Teflon bailers. The depth to water in well B-2b was measured at 74.9 feet prior to purging. Approximately 3 well volumes of water were purged prior to collection of the groundwater sample. During the purging, the pH, temperature and conductivity were measured. The water sample from B-2b was submitted under chain-of-custody to Sequoia Analytical laboratory for the following:

- Volatile Organic Compounds by EPA Method 8260
- Semi-Volatile Organic Compounds by EPA Method 8270
- Metals by EPA 6010 (An, Ba, Be, Cd, Cr, Co, Cu, Ag, Sn, V, Zn)
- Lead by Method 7421
- Mercury by Method 7470

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- Nickel by Method 7520
- Selenium by Method 7741
- Thallium by Method 7841
- Cyanide by Method 9010
- Sulfide by Method 9030
- Dissolved Iron by Method 6010

Groundwater samples were not collected from existing wells B-2 or B-3, as these wells were dry. Existing monitoring well B-1 had a measured depth to water level of 92.35 feet below top of well casing. This well was not sampled on this date, however, due to the protrusion of three screws into the well casing. These screws were reportedly installed as part of the well casing modifications conducted by the City. The protrusion of these screws into the well casing prohibited the 1.5-inch diameter bailer from being lowered into the well casing. On January 10, 2000, a second attempt was made to sample B-1 using a 1-inch diameter, stainless steel bailer. The sampling line attached to the bailer was subsequently cut by the screws, and the bailer was temporarily lost down the well casing. Efforts to retrieve the bailer were successful, however, due to the protrusion of the screws, further efforts to sample the well were abandoned until such time that the screws can either be removed or cut off. The City has since resolved this issue by cutting off the protruding screws. This will allow for on-going sampling.

On January 20, 2000, Kleinfelder sampled monitoring well B-1.

2.9.3. Groundwater Sampling Results

Analytical test results did not indicate concentrations of volatile organic compounds or semi-volatile organic compounds above laboratory reporting limits. Results of the metals analyses are summarized in the following table:

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Table 3
Summary of Metals Analyses

		Results (mg/1)		
Constituent	**Analytical Method**	**B-1**	**B-2b**	**Regulatory Criteria (mg/l)**
Antimony	6010	ND	ND	
Arsenic	**6020**	**ND**	**0.0841**	**0.05** [a] Primary MCL
Barium	6010	0.2188	0.477	1.0 [a]
Beryllium	6010	ND	ND	
Cadmium	6010	ND	ND	
Chromium	6010	0.0104	0.0129	0.05 [a]
Cobalt	6010	ND	ND	
Copper	6010	0.007	0.00812	1.0 [b]
Lead (total)	7421	0.0055	0.0092	0.05 [a]
Mercury	7470A	ND	ND	
Nickel	**7520 mod.**	**ND**	**0.34**	**0.0154** [b]
Selenium	270.3	0.0286	ND	
Silver	6010	ND	ND	
Tin	6010	ND	ND	
Vanadium	6010	ND	0.0473	24
Zinc	6010	0.0236	0.0380	5.0 [c]
Thallium	7841	ND	ND	
Cyanide	335.2	ND	ND	
Sulfide	376.1	ND	ND	
Iron (dissolved)	**200.7**	**ND**	**1.55**	**0.3** [c] Secondary MCL

[a] Source: 40 CFR, Parts 141, 12, 143, National Primary and Secondary Drinking Water Regulations – US EPA, 1989.
[b] Source: EPA Superfund Public Health Evaluation Manual, October 1986
[c] Source: US EPA – Region IX Drinking Water Branch – "Drinking Water Standards and Health Advisory Table:, June 1989, California Code of Regulations, Title 22.

2.10. SUMMARY OF MONITORING RESULTS

Results of the groundwater sampling indicated the presence of a number of metals. Arsenic was detected at a concentration slightly above the Maximum Contaminant Level (MCL) of 0.05 mg/l and dissolved iron was above the secondary MCL of 0.3 mg/l.

The results of the soil analyses from the two samples collected from monitoring well B-2b boring indicated total iron concentrations of 13,700 mg/kg (10 foot sample) and 17,900 mg/kg (50 foot sample). The results of the DI WET analyses indicated concentrations of 2.57 mg/l (10 foot sample) and 3.39 mg/l (50 foot sample). By comparison, the soil samples collected from the base of the landfill indicated concentrations of total iron at 37,600 mg/kg (110741) and 38,500 mg/kg (110742). Results of the STLC analyses indicated concentrations of iron at 2.25 mg/l

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(110741) and 0.852 mg/l (110742). Based on these results, the concentrations of iron detected in the soil samples collected from monitoring well B-2b are considered background levels.

Results of the landfill gas probe samples reported concentrations of oxygen (20%), nitrogen (80%) in carbon dioxide (0.042 to 0.11 %) in each of the samples analyzed. Carbon monoxide and methane were not detected in any of the samples analyzed.

2.11. AS-BUILT DRAWINGS

Appendix E contains the as-built drawings for the project prepared by The City of Vacaville. These drawings show the elevations and grades of the as-built clay cap as well as the alignment and elevations of adjacent drainage improvements.

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3 CERTIFICATION STATEMENT

This report was prepared under the direction of the undersigned and contains a summarization of the construction quality assurance activities performed during closure of the Brown Street Landfill in the City of Vacaville, Solano County California. Kleinfelder certifies that the CQA Plan was appropriately implemented and the construction proceeded in accordance with the project plans and technical specifications. The term certification is used herein as defined by Section 8770.6 of the California Business and Professions Code. Kleinfelder performed its services in accordance with the standards that existed in Solano County at the time of the construction activities.

Timothy A. Crandall, P.E.
CQA Officer



DRAFT

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4 LIMITATIONS

The conclusions and observations in this report are based on work performed by Kleinfelder and information provided by The City of Vacaville. This report was prepared in general accordance with the accepted standard of care, which existed in Northern California at the time the construction observation was performed. It should be recognized that interpretation, definition, and evaluation of soil conditions is a difficult and inexact art. Judgments leading to conclusions are generally made with a limited number of tests and observations.

This document may be used only by the client and only for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both on site and off site) or other factors may change over time, and additional work may be required with the passage of time. Any party other than the client who wishes to use this document shall notify Kleinfelder of such intended use. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party. No warranty, expressed or implied, is made.

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APPENDIX F

VEGETATIVE LAYER DOCUMENTATION

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IMPORT TOPSOIL SOIL ANALYSIS

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ENGINEERING SVCS.

Sunland Analytical Lab, Inc.
11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

Date Reported 08/27/97
Date Submitted 08/22/97

To: Sharon Yon
Redi-Gro Corporation
8909 Elder Creek Rd
Sacramento, CA 95828

From: Gene Oliphant, Ph.D.

The following is the report of analysis requested on SUN Order 8068 . The Sample Source was identified as TOP SOIL and the sample ID was . Your purchase order number is .
Thank you for your business.

* For future reference to this analysis please use SUN # 39813.

SOIL ANALYSIS

TYPE OF TEST	RESULTS	UNITS
SAND	67.5	%
SILT	16.9	%
CLAY	15.6	%
PASSING 2 MM SIEVE	100	%
PASSING .5 MM SIEVE	81.4	%

DRAFT

Sunland Analytical Lab, Inc.

11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8357

Date Reported 08/20/1997
Date Submitted 08/15/1997

To: Sharon Yon
Redi-Gro Corporation
8909 Elder Creek Rd
Sacramento, CA 95828

From: Gene Oliphant, Ph.D. /GO

The following is the report of analysis requested on SUN Order 8017 .
The sample location is TOP SOIL and the sample number is .
Thank you for your business.

* For future reference to this analysis please use SUN # 39679.

SOIL ANALYSIS

Saturation Percent (SP)	49	Soil Texture Loam
pH	5.92	
E.C.	0.56	mmho/cm
Tot.Dissolved Salts	358.4	ppm
Infiltration Rate (0% Slope)	0.54	in/hr
% Organic Matter	5.3	
C.E.C.	14.5	meq/100g
Sodium Absorption Ratio (SAR)	1.5	
Exchangable Sodium Percent (ESP)	1.0	
Gypsum Req. ($CaSO_4*2H_2O$)	None Required	
est. Nitrogen Release	3.3	#/1000 sq.ft.

Nitrate	39.75	ppm	**********
Phosphorus	29.23	ppm	**********
Potassium	60.13	ppm	**********
Sulfur	17.41	ppm	**********
Chloride	46.06	ppm	**********
Carbonates	No Test		
Sodium	32.05	ppm	
Calcium	2152.78	ppm	**********
Magnesium	423.22	ppm	**********
Boron	0.06	ppm	*
Copper	2.26	ppm	**********
Iron	193.01	ppm	**********
Manganese	23.02	ppm	**********
Zinc	1.32	ppm	**********

Very Low	Low	Adequate	Excessive

DRAFT

Sunland Analytical Lab, Inc.

11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

DATE 08/20/1997
SUN NUMBER 39679

Information requested by:
Sharon Yon
Redi-Gro Corporation

Information for:
TOP SOIL
Sample ID:

SOIL RECOMMENDATIONS FOR LANDSCAPE GARDENING

SOIL pH (Acidity and Alkalinity)

The pH of this sample indicates the soil is moderately acid and should be modified for non acid-tolerant plants. Apply 32 pounds of Lime per 1000 sq.ft. and work into ground before planting.

DISSOLVED SALTS (Indicated by E.C. & TDS)

These conditions are in the normal range for plant growth.

SOIL TEXTURE AND RATE OF WATER INFILTRATION

The infiltration rate for all soil textures decreases with increasing ground slope. At 0 to 4%, 5 to 8%, 9 to 12%, 13 to 16% and above 16% the infiltration rate of this sample decreases from 0.54 to 0.43, 0.32, 0.22, 0.14, respectively. Infiltration rate also decreases with percent of ground cover and by compaction.

WATER PENETRATION OF SOIL DUE TO CHEMICAL CHARACTERISTICS

When exchangable Sodium increases in the soil, water penetration decreases. Based on SAR and ESP values this sample has no penetration problem due to soil Sodium.

ORGANIC MATTER

Organic matter provides a slow nitrogen release and aids water retention. This sample has a moderate Organic Matter content.
To maintain moisture and provide sustained nitrogen release a level of 10% organic matter is recommended. Use amending material that is approximately 75% organic matter (i.e. many ground fir barks). Based on the analysis of this soil sample apply 2 yards per 1000 sq.ft. Spread evenly and blend into the top six inches of soil. It is a reasonable practice to apply a top dressing of 3 inches of organic mulches to aid water penetration and retention.

SOIL BORON

Boron concentrations are in a range allowing normal plant growth.

YES

YES

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Sunland Analytical Lab, Inc.

11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

PAGE #2

DATE 08/20/1997
SUN NUMBER 39679

Information requested by:
Sharon Yon
Redi-Gro Corporation

Information for:
TOP SOIL
Sample ID:

SOIL RECOMMENDATIONS FOR LANDSCAPE GARDENING

GENERAL N-P-K RECOMMENDATION

		#'S REQUIRED per 1000 sq.ft
	Nitrogen (N)	None Required
	Phosphorus (P2O5)	None Required
YES	Potassium (K2O)	1.7
	Magnesium (Mg)	None Required
YES	Sulfur (S)	2
	Zinc (Zn)	None Required

RECOMMENDED N,P,K application of 6-20-20 in lb. per 1000 sq.ft. is 9

TREES AND SHRUBS

Excavate holes for planting shrubs and trees to at least twice the volume of the container. Prepare backfill for tree and shrub planting holes by mixing three parts of native soil (or imported top soil) with one part organic amendment (preferably nitrogen and iron fortified) and 2.5 pounds of 6-20-20 per yard of mix. ~~For extended fertilization, place slow-release fertilizer tablets in each hole per manufacturer's instructions.~~ If 6-20-20 was not directly added to backfill mix, during backfill apply uniformly 1/2 oz of 6-20-20 per gallon containers, 2.5 oz per 5 gallons, 6 oz per 24 inch boxes.

YES NO

Maintenance Fertilization

Apply 5 pounds of Ammonium sulfate (21-0-0) per 1000 sq.ft.every month until plants become established. After established, apply 28-3-4 (or similar preparation) to provide desired growth rate and color.

DURING PLANT ESTABLISHMENT PERIOD

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ONSITE SOIL ANALYSIS

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Sunland Analytical
11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

Date Reported 12/16/99
Date Submitted 12/15/99

To: Mark Schmiedeknecht
Becmar Construction Landscaping
187 Arrowhead Dr.
Vacaville, CA 95687

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following:
Location : CITY VACAVILLE BROWN Site ID : LANDFILL 1.
Thank you for your business.

* For future reference to this analysis please use SUN # 22273-50034.

SOIL ANALYSIS

Saturation Percent (SP)	72		Soil Texture Clay
pH	6.95		
E.C.	0.79	mmho/cm	
Tot.Dissolved Salts	505.6	ppm	
Infiltration Rate (0% Slope)	0.13	in/hr	
% Organic Matter	8.5		
C.E.C.	26.9	meq/100g	
Sodium Absorption Ratio (SAR)	4.5		
Exchangable Sodium Percent (ESP)	5.1		
Gypsum Req. (CaSO4*2H2O)	None Required		
est. Nitrogen Release	4.4	#/1000 sq.ft.	

Nitrate	2.86	ppm	*
Phosphorus	16.21	ppm	**********
Potassium	60.20	ppm	**********
Sulfur	10.91	ppm	**********
Chloride	189.34	ppm	**********
Carbonates	120.78	ppm	**********
Sodium	314.80	ppm	
Calcium	3384.87	ppm	**********
Magnesium	1028.38	ppm	**********
Boron	0.14	ppm	****
Copper	0.76	ppm	*******
Iron	12.12	ppm	**********
Manganese	2.16	ppm	**********
Zinc	0.87	ppm	**********

Very Low	Low	Adequate	Excessive

DRAFT

Sunland Analytical
11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

DATE 12/16/99
SUN NUMBER 50034

Information requested by:
Mark Schmiedeknecht
Becmar Construction Landscaping

Information for:
CITY VACAVILLE BROWN
Sample ID: LANDFILL 1

SOIL RECOMMENDATIONS FOR LANDSCAPE GARDENING

SOIL pH (Acidity and Alkalinity)

The pH of this sample indicates the soil is in a range for normal growth of most plants. No modification is required.

DISSOLVED SALTS (Indicated by E.C. & TDS)

These conditions are in the normal range for plant growth.

SOIL TEXTURE AND RATE OF WATER INFILTRATION

The infiltration rate for all soil textures decreases with increasing ground slope. At 0 to 4%, 5 to 8%, 9 to 12%, 13 to 16% and above 16% the infiltration rate of this sample decreases from 0.13 to 0.10, 0.08, 0.05, 0.03, respectively. Infiltration rate also decreases with percent of ground cover and by compaction.

WATER PENETRATION OF SOIL DUE TO CHEMICAL CHARACTERISTICS

When exchangable Sodium increases in the soil, water penetration decreases. Based on SAR and ESP values this sample has no penetration problem due to soil Sodium. No Gypsum required.

ORGANIC MATTER

Organic matter provides a slow nitrogen release and aids water retention. This sample has a moderate Organic Matter content.
To maintain moisture and provide sustained nitrogen release a level of 10% organic matter is recommended. Use amending material that is approximately 75% organic matter (i.e. many ground fir barks). Based on the analysis of this soil sample apply 1 yards per 1000 sq.ft. Spread evenly and blend into the top six inches of soil. It is a reasonable practice to apply a top dressing of 3 inches of organic mulches to aid water penetration and retention.

SOIL BORON

Boron concenration is below adequate level. Apply 0.5 (1/2) oz./1000 sq.ft. of boric acid. Dissolve in 2 gallons of water and apply by spraying. Apply carefully because excess boron is toxic to plants !!

SOIL MICRONUTRIENTS

Micronutrients, Copper, Iron, Manganese and Zinc, in soil are present in small amounts. However, they play a necessary role in plant metabolism. Without appropriate amounts plants will not thrive. Apply the following per 1000/ sq.ft. Do not mix micronutrients during application (use a separate application for each element indicated).

Because copper, manganese and zinc are in very small amounts, dissolve (each) in 2 gallons of water and use a sprayer to obtain an even application. Apply 0.2 # Copper Sulfate, 0.5 # Zinc Sulfate and water.

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Sunland Analytical
11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

PAGE #2

DATE 12/16/99
SUN NUMBER 50034

Information requested by:
Mark Schmiedeknecht
Becmar Construction Landscaping

Information for:
CITY VACAVILLE BROWN
Sample ID: LANDFILL 1

SOIL RECOMMENDATIONS FOR LANDSCAPE GARDENING

SOIL MACRONUTRIENTS : NITROGEN-PHOSPHORUS-POTASSIUM (N-P-K)
GENERAL N-P-K RECOMMENDATION

Use ONE of these NPK preparations for the first fertilizer application.

Standard NPK Fertilizer Preparations	6-20-20	5-20-10	16-16-16	0-10-10	28-3-4	21-0-0	Customer Choice None
#/1000 sq.ft.	19	23	N/A	N/A	N/A	N/A	**

GRASS OR SOD PREPARATION

Till in organic matter, N,P,K and micro nutrients in addition to any lime gypsum or sulfur as directed above. Smooth soil surface and follow seed or sod producers direction for moisture and product application.

TREES AND SHRUBS

Excavate holes for planting shrubs and trees to at least twice the volume of the container. Prepare backfill for tree and shrub planting holes by mixing three parts of native soil (or imported top soil) with one part organic amendment (preferably nitrogen and iron fortified) and 2.5 pounds of 6-20-20 per yard of mix. For extended fertilization, place slow release fertilizer tablets in each hole per manufacturer's instructions. If 6-20-20 was not directly added to backfill mix, during backfill apply uniformly 1/2 oz of 6-20-20 per gallon containers, 2.5 oz per 5 gallons, 6 oz per 24 inch boxes.

Summary and Suggested Sequence of Soil Improvements (#/1000 Sq.Ft.)

Gypsum	20	# - leach soil
Organic Amendment	1	Yd./1000 Sq.Ft. Bulk organic amendment (nitrofie
N-P-K Fertilizer	See above chart	
Micro Nutrients		
Copper	0.2	# Copper sulfate
Zinc	0.5	# Zinc Sulfate
Boron	0.5	oz Boric Acid - excess TOXIC !!!
Sulfate-Sulfur	Low sulfate compensated by other soil improvements.	

Maintenance Fertilization

Apply 5 pounds of Ammonium sulfate (21-0-0) per 1000 sq.ft.every month until plants become established. After established, apply 28-3-4 (or similar preparation) to provide desired growth rate and color.

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HYDROSEED DESIGN

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Freedlun Hydroseeding Inc.

612 Corte Seville, Vacaville CA 95688 Lic#740810
707-448-9423 Facsimile 707-448-1319 Fed ID#94-3275146

December 16, 1999

Becmar Landscaping
448-8627
Fax 448-8672

Mark;

After conferring with Craig Duncan of BAS, and Dave Gilpin of Pacific Coast Seed of Livermore, here is the bottom line:

GRASSLANDS

Step One

Mulch	1000 lbs. per acre
Compost	3000 lbs. per acre

Seed mix plus additional Wild Flowers:

Blando Bromegrass	12 lbs.
Zorro fescue	6 lbs.
Rose Clover	9 lbs.
Calif. Poppy	2 lbs.
Plus additional WF	12 lbs.

Step Two

Mulch	1500 lbs. per Acre
Binder	80 lbs. per Acre

Shrub Areas

Same as above with the addition of :

Eriogonum fasciculatu	1.5 lbs.
Salvia sonomensis	.25 lbs.
Grindelia camphorum	1.0 .lbs.
Lotus sscoparius	3.0 lbs.

This should satisfy all parties because it is a combination of each of their recommendations.

Chuck Freedlun

DRAFT

PREPARED FOR:

The City of Vacaville
Deparment of Public Works

REPORT OF WELL LOGGING AND GROUNDWATER QUALITY ANALYSIS BROWN STREET LANDFILL VACAVILLE, CALIFORNIA

June 15, 1994

BCA File No. 2333-2

DRAFT

BALBI & CHANG ASSOCIATES
Geotechnical Consultants
Construction Materials Testing

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BALBI & CHANG ASSOCIATES
Geotechnical Engineering • Environmental Compliance
Construction Observation • Materials Testing

June 15, 1994
Project No. 2333-2

Mr. Robert Collison
Assistant Civil Engineer
Department of Public Works
650 Merchant Street
Vacaville, CA 95688

Subject: **Report of Well Logging and Groundwater Quality Analysis**
Brown Street Landfill
Vacaville, California

Dear Rob:

In accordance with our proposal dated April 18, 1994, and our discussions, we have performed well logging, field observations, and groundwater sampling at the closed Brown Street Landfill, located in Vacaville, California. This report summarizes the drilling and sampling activities at the site.

EXECUTIVE SUMMARY:

BCA logged three soil borings, B-1 (0-145 feet), B-2 (110-155 feet), and B-3 (0-110 feet) on April 8, 1994 through April 15, 1994. Water was encountered in B-1 at 93 feet during drilling. A monitoring well was installed in B-1, which produces water at 93 feet. Soil borings B-2 and B-3 did not encounter water during the drilling. But, monitoring wells were installed in possible water-bearing zones in B-2 and B-3.

The sediments encountered in the borings were the Plio-Pleistocene alluvial fan deposits of the Tehama Formation, which is exposed in the hills west of the site. The sediments are mainly yellow brown and light brown to buff colored silty clays and clayey silts with rare sand layers, several inches to a foot thick. The water in B-1 is produced from what is probably a localized sandy perched aquifer, which is approximately eight feet thick.

On May 12, 1994, BCA extracted a water sample from B-1 (B-2 and B-3 were dry) for analysis. Analytical test results for water sample B-1 are below detection limits (non-detect

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at detection limits, or ND) for all Chlorinated Volatile Organics (EPA 624), Semi-Volatile Organics (EPA 625), Biological Oxygen Demand (EPA 405.1), and Chemical Oxygen Demand (EPA 410.1). Other general mineral and metals analyses revealed no unusually high concentrations for the parameters tested.

The firm of Balbi & Chang Associates is pleased to provide professional environmental support services to the City of Vacaville. If you have any questions please contact our office at your convenience.

Respectfully Submitted,

BALBI & CHANG ASSOCIATES

Chuck Headlee
Project Geologist

Dean A. Richesin, C.E.G. #1055
Senior Engineering Geologist

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APPENDICES

Appendix A - Analytical Results

Appendix B - Field Daily Reports (BCA) - Daily Drilling Reports (Layne)

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1.0 INTRODUCTION AND PURPOSE

The Brown Street Landfill (Site), is an abandoned landfill located approximately 0.5 miles north of Interstate 80 on Browns Valley Parkway in Vacaville, California (Plate 1). As shown on Plate 2, the landfill is semi-rectangular and encapsulated by a 10 foot high earthen berm. The landfill surface is nearly level at an elevation of 140 feet above mean sea level and is approximately 6.5 acres in size. The landfill occupies an undeveloped portion of a City of Vacaville municipal park. The surrounding area is agricultural to the north, developed city parkland to the east, and residential 200 feet to the west.

According to the City of Vacaville Department of Public Works, the landfill accepted municipal and household waste until the late 1960's. The materials brought to the site were sometimes burned at the landfill and buried there. ~~According to the City, the landfill was capped with a layer of impermeable clay when it was closed.~~ The surface of the landfill is covered with thick grasses and bushes. Occasional pieces of metal from the landfill are present at the surface. Several 55 gallon drums, from previous shallow borings according to the City, were present in two or three locations about the landfill perimeter.

In order to determine if there was leakage from the landfill into the subsurface and to assess local groundwater quality, the City of Vacaville contracted with Layne-Western Company (Layne) to drill one boring (Boring B-2) on the west side of the landfill to obtain a water sample for analysis. This boring was drilled to 110 feet but did not encounter water. This boring was not logged by Balbi and Chang Associates (BCA) during the drilling operation. The City of Vacaville decided to move off this boring and drill a boring on the south edge of the landfill. The City retained BCA to provide a geologist to log the boring during the drilling operation of the new boring and to identify any water-bearing zones present.

The locations of soil borings B-1, B-2, and B-3 are shown on Plate 2. These borings/well sites were selected by the City of Vacaville.

2.0 PROPOSAL AND SCOPE OF WORK

The scope of work for BCA expanded during the course of field work. Initially, BCA was retained to provide geologic logging services for a single boring (Boring B-1) located on the south side of the Brown Street landfill. During field operations the scope of work was expanded to include geologic logging of two additional borings and collecting groundwater samples as available in the wells. The final scope of work was expanded to include the following:

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1. Log three borings/wells
2. Develop a water quality testing program appropriate for this landfill.
3. Collect water samples for chemical testing.
4. Prepare a report which presents boring/well logs, chemical test results, and a summary of field activities.

3.0 PROJECT ACTIVITY

3.1 Drilling and Well Logging

On April 8, 1994 BCA met with the City of Vacaville engineer, at the Brown Street Landfill. At that time the City selected the site for boring B-1 and directed Layne where to drill. It was decided to sample the boring at five foot intervals. That afternoon indications of water were noted in the 95-foot sample. The hole was continued to 100 feet where drilling ceased. On Monday, April 11, 1994, BCA used an electronic sounding device to note water in the hole at approximately 97 feet; it was then decided to continue drilling to 150 feet and continue sampling every five feet. The boring was completed at 145 feet and a monitoring well was installed. Cement was placed in the boring/well from 145 feet to 103 feet. Two feet of sand was placed on the cement and slotted casing was installed from 98 feet to 78 feet (Plate 3, well construction detail).

On April 13, 1994, Layne was directed by the City to return to the first boring they drilled, identified in this report as B-2, and continue drilling to 150 feet or until water was encountered. BCA logged the drilling at five foot intervals below the initial depth of 110 feet. Later that day the City decided to terminate the drilling at 155 feet. The hole was cemented from 155 feet up to 140 feet; the cement was allowed to set overnight. After placing two feet of sand on the cement, sixty feet of slotted casing (138 feet to 78 feet) was installed and the well was then completed (Plate 4, well construction detail). BCA measured the depth to water in B-1 again on April 14; it was at 93 feet.

On April 14, 1994 Layne set up at the third boring (B-3) and started drilling. The hole was logged by BCA at ten foot intervals to 80 feet and 5 foot intervals from 80 feet to 110 feet. Work ceased for the day at a depth of 39 feet and was continued on April 15, 1994. The well was completed to 110 feet by mid-afternoon of April 15. Forty feet of slotted casing was installed from 108 feet to 68 feet (Plate 5, well construction detail). BCA left the site at 4:15 pm while Layne was completing the cementing of the hole.

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On April 18, 1994 BCA met Layne at the site to discuss the drilling project. BCA observed Layne bailing approximately six gallons of water from monitoring well B-1. Monitoring wells B-2 and B-3 were checked and no water was present in either monitoring well. BCA left the site and met Mr. Collison at his office to deliver the keys to the monitoring well locking caps and a copy of the Solid Waste Assessment Test guidance document.

Copies of BCA Field Daily Reports and Layne Drilling Daily Reports are provided in Appendix B.

3.2 Groundwater Sampling

A groundwater sample was obtained from monitoring well B-1 on May 12, 1994. Prior to sampling the well was purged sufficiently (3 to 5 well volumes) to remove any "stagnant water". After purging, a groundwater sample was obtained using a disposable bailer. The water sample was placed into the appropriate bottles and vials, preserved as required, and transported to a State certified laboratory for analysis. Field data collection sheets and chain of custody forms were completed and are presented along with the analytical results in Appendix A.

4.0 BORING AND WELL LOGS

4.1 Sediments Encountered

A sample was taken at five foot intervals from borings B-1 (ground surface to total depth) and B-2 (110 feet to total depth). Boring B-3 was sampled at ten foot intervals from ground surface to 80 feet and five foot intervals from 80 feet to total depth. Soil samples were obtained by driving a sampler containing thin brass liners into the bottom of the boring. The procedures used in obtaining these samples are identical to Standard Split Spoon Sampler methods (ASTM D-1786-84). When the sample was withdrawn from the boring a field description was recorded using USCS methodology and it was placed in a plastic zip-lock bag for storage.

Soil boring B-1 (Plate 3), located on the southern margin of the landfill, was drilled to a depth of 145 feet. From 0 to 30.5 feet the sediments consist of brown to orange brown sand and silt with thin layers of stiff greenish-grey clay (weathered pumice and volcanic sediments). From 30.5 feet to 92 feet the sediments are mainly light-brown to orange-brown fine sands and silts and greenish grey clay. At 92 feet a light-brown medium-grained sand is present. Water is

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present in this sandy layer. This layer is approximately eight feet thick and is underlain by stiff yellow-brown silt and clay. The yellow brown clayey silty material persists to the bottom of the boring at 145 feet.

A monitoring well was installed in boring B-1. The boring was cemented from the bottom to 103 feet. Slotted casing was emplaced from 98 feet to 78 feet. A sand pack was placed around and below the well casing from 103 feet to 68 feet. Two feet of bentonite seal was placed over the sand and a cement seal then was installed from 66 feet to the ground surface. A well monument was constructed over the well head and a locking cap was installed.

Soil boring B-2 (Plate 4), located approximately 200 feet west of the landfill, had been previously drilled to a depth of 110 feet with no soil samples taken. Therefore, no log is available for the first 110 feet of this boring. Soil Boring B-2 did not encounter water and drilling ceased at 110 feet. After water was encountered in B-1, B-2 was deepened to 156.5 feet.

From 110 feet to 142 feet the sediments encountered in this boring B-2 were mainly light brown to yellow brown stiff silt with minor clay. At 135 feet the outside of the sampler was slightly moist. A three foot layer of light brown sand is present from 142 feet to 145 feet. The yellow brown stiff clayey silt is then present to 150.5 feet where another two foot layer of the fine to medium-grained light brown sand is present. From 152 feet to 156.5 feet the sediment in the boring is red stiff clayey silt.

A monitoring well was installed in this boring. Cement was first placed in the boring from the bottom up to 142 feet. Two feet of sand was placed on the cement and slotted casing was installed from 140 feet to 80 feet. The City of Vacaville decided to place the 60 foot slotted interval in this well because of the thin sand layers present in the deeper interval. A sand pack was placed from 142 feet to 70 feet with a two foot bentonite seal from 68' to 78'. The well was then cemented to the ground surface. A well monument was placed over the well-head and a locking cap was installed.

Soil boring B-3 (Plate 5), located on the eastern edge of the landfill, was drilled to 110.5 feet. From 0 to 40 feet the sediments consist of light brown to tan clayey silt. The sediments were slightly moist and contain approximately 10% weathered pumice. At 40 feet there is a thin (less than one foot thick) layer of sandy silt. At 41 feet to 49 feet there is a layer of brown to tan, slightly moist, clayey silt. From 49 feet to 79 feet the sediments are primarily fine-grained silty clayey sands with minor laminae of fine to medium sand. Within this 30 foot section at 59 feet to 60.5 feet a layer of silty sand to fine to medium sand is present. Dark

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gray angular clasts of sand are present at 60.5 feet. Between 79 feet and 84 feet the sediments are fine to medium sands with 10% coarse pebbles. From 84 feet to 94 feet the sediments become coarser. The sediments are gray to brown silty sands with minor pebbly sand seams. The pebbly seams are moist but not saturated. From 94 feet to 110.5 feet (total depth) the sediments are dry and stiff, brown to tan silty sands with clay.

A monitoring well was installed in this boring. Thirty feet of slotted casing was installed between 108 feet and 78 feet. A sand pack was placed from the bottom of the hole up to 68 feet. A two foot bentonite seal was placed above the sand and the hole was then cemented to the ground surface. A locking well monument and cap were then installed to complete the well.

4.2 Groundwater Conditions

United States Geological Survey (USGS) Professional Paper 1464, published in 1960, describes the upper water-bearing zone of this area as the upper portion of the Tehama Formation. The Tehama Formation consists of up to 400 feet of interbedded conglomerate, gravel and sand, pumiceous tuff, fine-grained silts, and clays. Pliocene to Pleistocene age unconsolidated alluvial deposits (up to 200 feet thick), derived from the Tehama Formation, overly this aquifer. Perched aquifers are present within the upper portion of the unconsolidated alluvial deposits. The borings at the Brown Street Landfill appear to have encountered this thick section of variable alluvial fan deposits derived from the Tehama Formation.

Groundwater was encountered in boring B-1 at 93 feet. A monitoring well was installed in this boring to intercept the water-bearing zone between 103 and 93 feet. Monitoring wells were installed in borings B-2 and B-3 to allow for access to a potent water-bearing zone comparable to that encountered in B-1. Monitoring wells B-2 and B-3 were still dry after several weeks of observation.

5.0 WATER QUALITY TEST PROGRAM

5.1 Analytical Parameters

Because the exact nature of the refuse deposited in the landfill is unknown, the selection of the chemical test parameters was based upon those most commonly used in landfill water quality test programs. Therefore water sample, B-1, was analyzed for the following constituents using established EPA test methods:

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Analyte	EPA Test Method
• Chlorinated Volatile Organics	EPA 624
• Semi-Volatile Organics	EPA 625
• ICAP Metals (List of 17) plus AA for Hg and Se	EPA 3020/3010
• Chemical Oxygen Demand	EPA 410.4
• Biological Oxygen Demand	EPA 405.1
• Total Dissolved Solids	EPA 160.1
• Chloride	EPA 300
• Nitrate-Nitrogen	EPA 300
• Bicarbonate Alkalinity	EPA 310.1
• Total Alkalinity	EPA 310.1
• Routine Field Tests (pH, conductance, temperature)	

5.2 Analytical Results

Water from monitoring well B-1 was collected on May 12, 1994, using the procedures outlined in the proposal dated April 18, 1994. The water sample was sent to McCampbell Analytical Inc., a State certified testing laboratory, to be analyzed for the parameters listed in section 5.1. Analytical test results for water sample B-1 are as follows:

Analyte	Detection Limit	Analytical Results
• Chlorinated Volatile Organics	5-10 ug/l	ND
• Semi-Volatile Organics	10-50 ug/l	ND
• ICAP Metals (List of 17)		
Arsenic	0.002 mg/l	0.005 mg/l
Barium	0.05 mg/l	0.15 mg/l
Chromium	0.01 mg/l	0.01 mg/l
Nickel	0.01 mg/l	0.02 mg/l
Vanadium	0.005 mg/l	0.016 mg/l
Zinc	0.005 mg/l	0.02 mg/l
Remaining ICAP Metals	0.1-0.005 mg/l	ND
• Chemical Oxygen Demand	20 mg/l	ND
• Biological Oxygen Demand	6 mg/l	ND
• Total Dissolved Solids	10 mg/l	830 mg/l
• Chloride	0.5 mg/l	87 mg/l
• Nitrate-Nitrogen	0.1 mg/l	29 mg/l
• Bicarbonate Alkalinity	2 mg/l	380 mg/l
• Total Alkalinity	2 mg/l	380 mg/l

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Copies of the analytical results are presented in Appendix A.

6.0 FINDINGS AND CONCLUSIONS

Three borings were drilled on the perimeter of the Brown Street Landfill, B-1, B-2, and B-3. Because groundwater was encountered in only one of the three borings, B-1, no estimate can be made of groundwater gradient or flow direction. Groundwater in B-1 is located at a depth of 93 feet below grade. The water producing interval in B-1 appears to be restricted to an eight foot thick sandy section bounded by clayey silt above and below.

Alluvial fan deposits consist of laterally and vertically discontinuous sections of clays, silts, sands, and gravels, and contain localized perched aquifers. As stated above, borings B-1, B-2, and B-3, were drilled within these alluvial fan deposits. Consequently, it is not altogether surprising that B-1 encountered water at 93 feet, while B-2 and B-3 did not encounter water.

Groundwater analytical test results show background levels of certain metals and low levels of dissolved solids, chlorides, nitrates, and alkalinity. Other chemical constituents often associated with landfill water quality concerns were not present above detection limits in water from B-1.

7.0 REPORT LIMITATIONS

This report has been prepared for the exclusive use of the City of Vacaville (Client) with specific application to the site known as the Brown Street Landfill located on Browns Valley Parkway in Vacaville, California. The use of this report, its contents, or any part of it, by any one other than Clients or authorized designee, is not allowed.

These findings and conclusions are based on field identification of soil samples taken during the drilling operation described in this report, and the analytical results of one groundwater sample obtained from monitoring well B-1.

The services provided under this contract as described in this report include professional opinions and judgments based on data collected. These services have been performed according to generally accepted assessment practices in this region. The opinions and conclusions contained in this report are typically based on information obtained from:

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1. Observations and measurements by field staff
2. Opinions and judgments of our personnel based on available information.

The Client acknowledges that Balbi & Chang Associates (BCA) has been retained for the sole purpose of assisting the Clients in logging the borings/wells known as B-1, B-2, and B-3 , and in presenting the analytical results of the groundwater sample obtained from monitoring well B-1. It is recognized and agreed that BCA and their sub-consultants have assumed responsibility only for performing this investigation and presenting this report and conclusions to the Client. The responsibility for making any further evaluation, disclosure, or report to any third party or for the taking of corrective, remedial, and/or mitigative action shall be solely that of the Client. The Client agrees to hold BCA and sub-consultants harmless from any and all liability, damage, loss, cost, or expense, including attorney fees, in any way arising from the claim of any third party. BCA agrees not to make, except to the Client or at Client's request, any report to any third party not legally required of it.

Respectfully submitted,

BALBI & CHANG ASSOCIATES

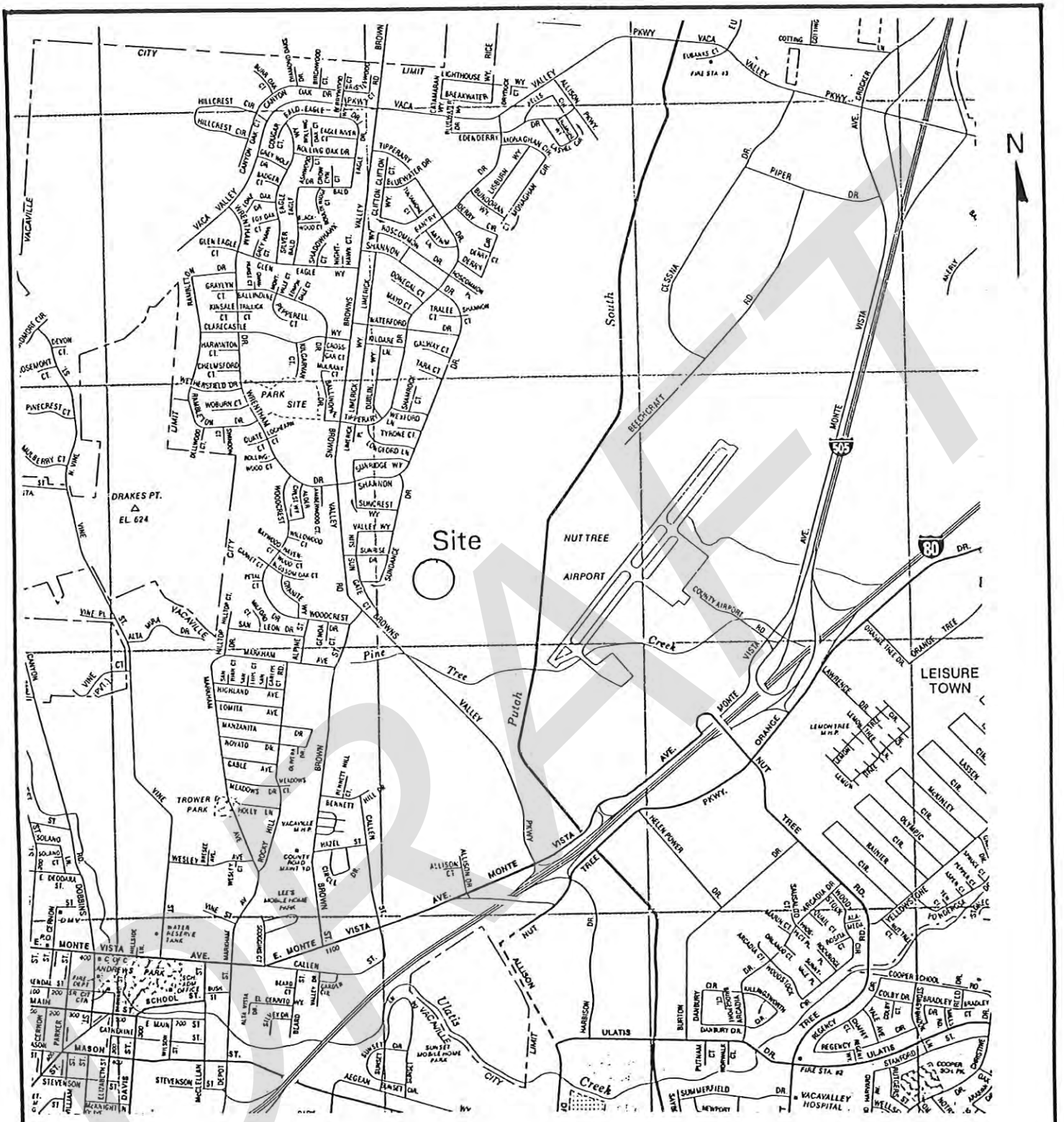
Chuck Headlee
Project Geologist

Dean A. Richesin, C.E.G. #1055
Senior Engineering Geologist

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PLATES

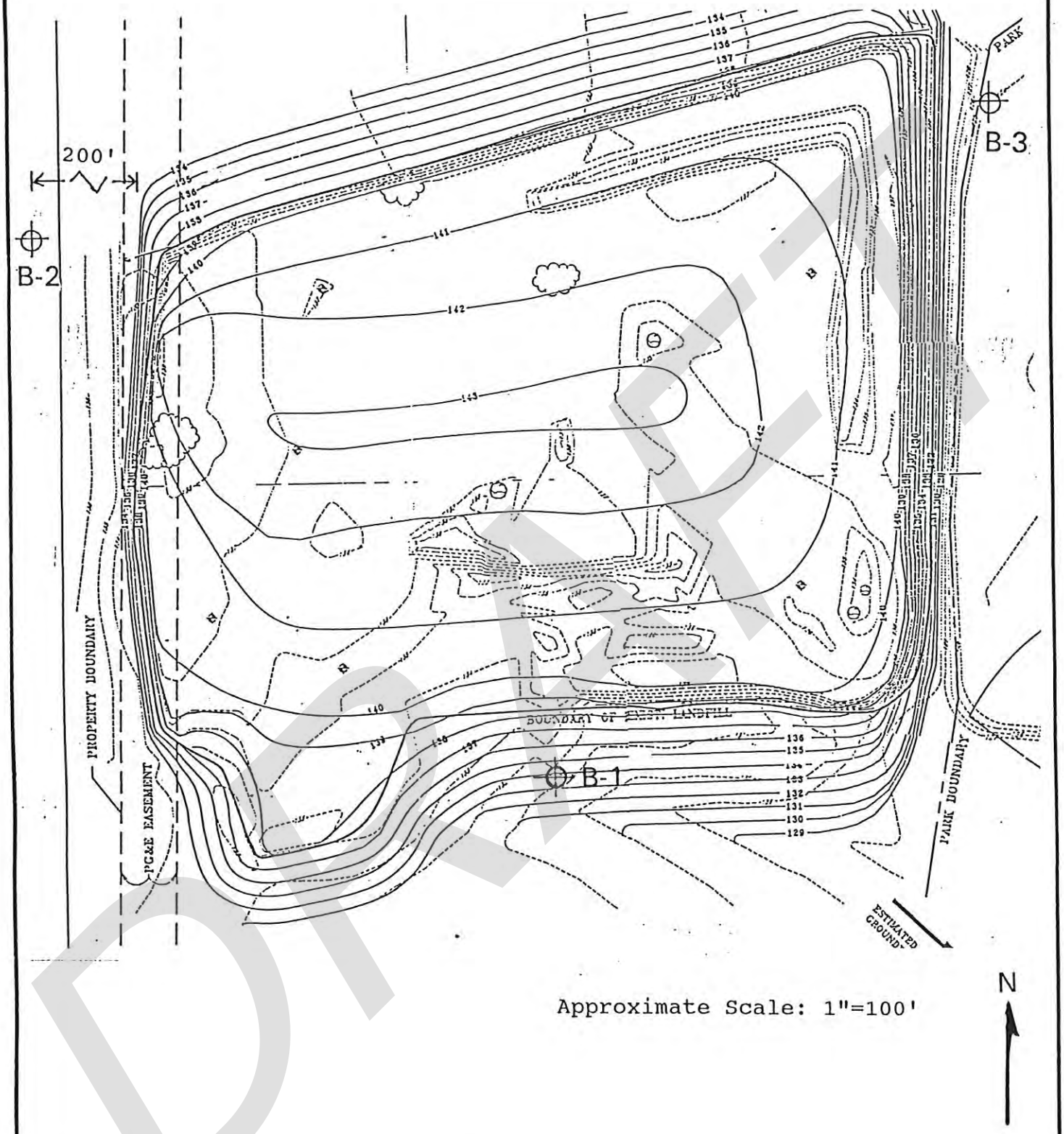
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Note: Adapted from CSAA map of the City of Vacaville

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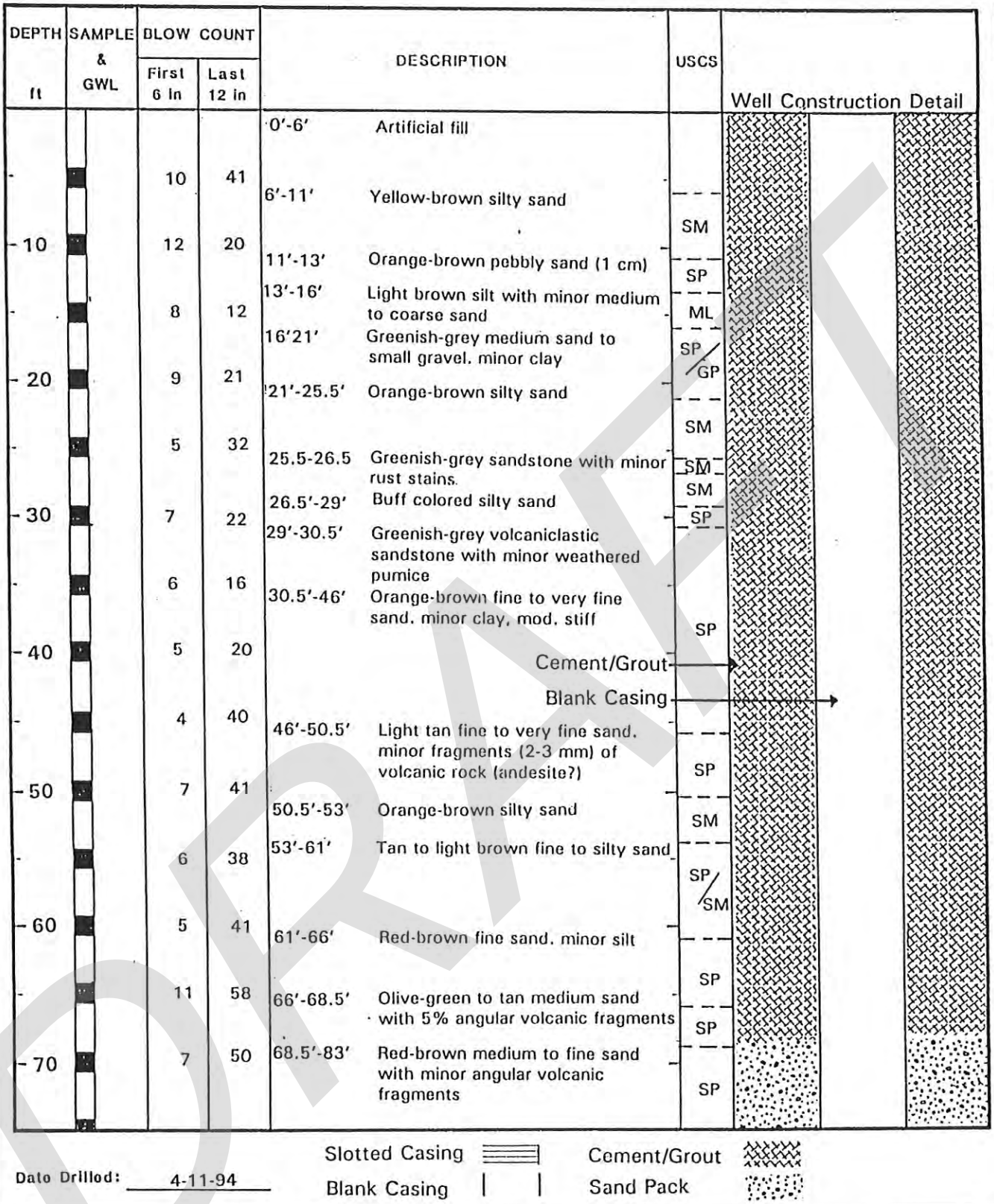
	Brown Street Landfill Site Vacaville, California	SITE LOCATION MAP
BALBI & CHANG ASSOCIATES Geotechnical Engineering • Construction Observation Environmental Compliance • Materials Testing	PROJECT NO. 2333-2	DATE 6-15-94
	PREPARED BY CTH	PLATE 1



Note: Adapted from plans provided by the City of Vacaville

	Brown Street Landfill Site Vacaville, California	SITE FEATURES
BALBI & CHANG ASSOCIATES Geotechnical Engineering • Construction Observation Environmental Compliance • Materials Testing	PROJECT NO. 2333-2	DATE 6-15-94
	PREPARED BY CTH	PLATE 2

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Date Drilled: 4-11-94

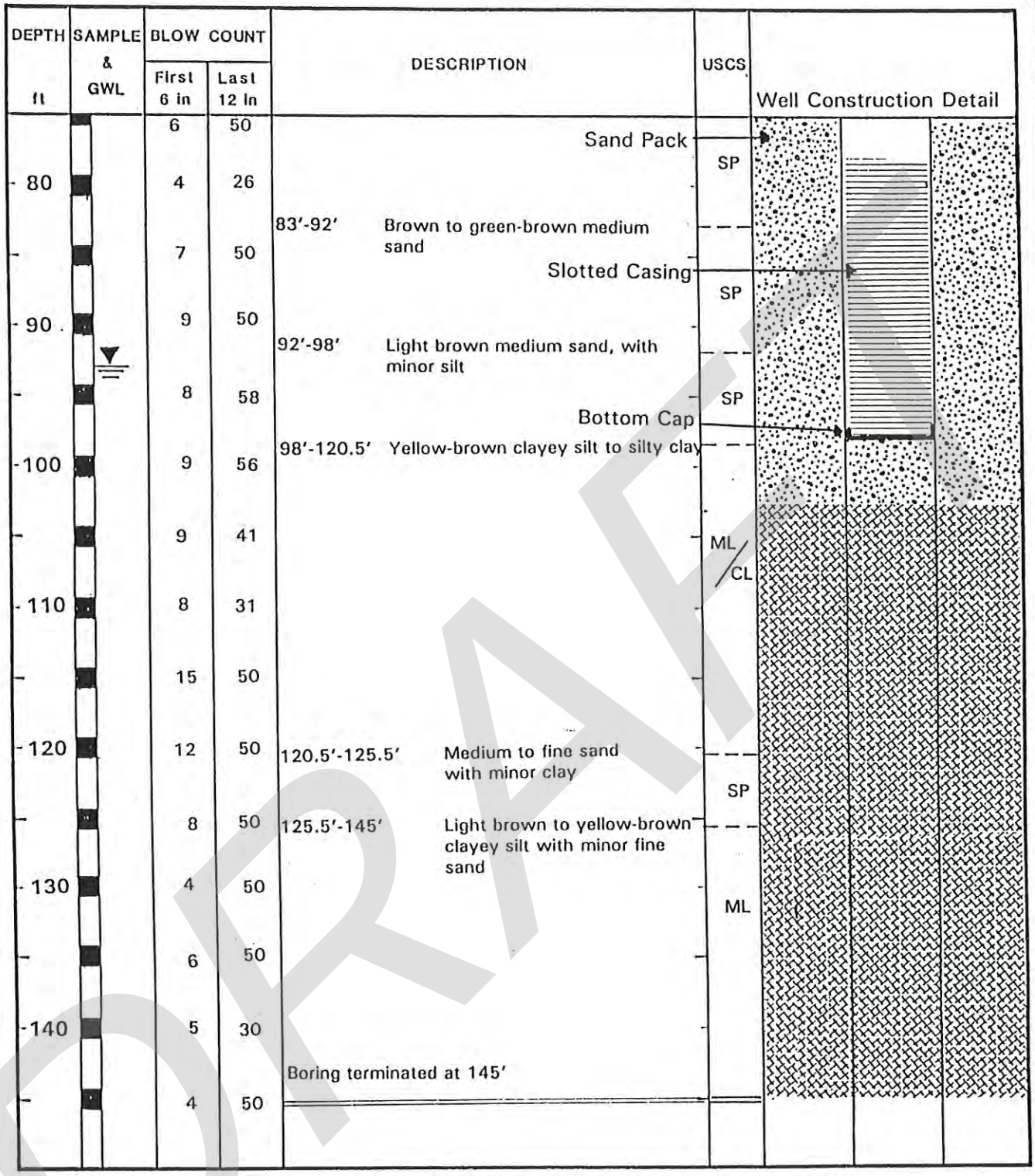
Brown Street Landfill
City of Vacaville

LOG OF BORING NO. B-1

BALBI & CHANG ASSOCIATES
Geotechnical Consultants / Materials Testing

PROJECT NO.	2333-1	DATE	5-13-94
PREPARED BY	CH/DAR	PLATE	3

DRAFT



Slotted Casing | | Cement/Grout

Blank Casing | | Sand Pack

Date Drilled: 4-11-94

Brown Street Landfill
City of Vacaville

LOG OF BORING NO. B-1

BALBI & CHANG ASSOCIATES
Geotechnical Consultants / Materials Testing

PROJECT NO. 2333-1 | DATE 5-13-94

PREPARED BY CH/DAR | PLATE 3

DRAFT

DEPTH ft	SAMPLE & GWL	BLOW COUNT First 6 in	BLOW COUNT Last 12 in	DESCRIPTION	USCS	Well Construction Detail
10						
20						
30				Boring was not logged from 0'-110'		
40						
50						Cement/Grout
60						
70						Blank Casing

Slotted Casing ≡≡≡ Cement/Grout

Blank Casing | | Sand Pack

Date Drilled: 4-13-94

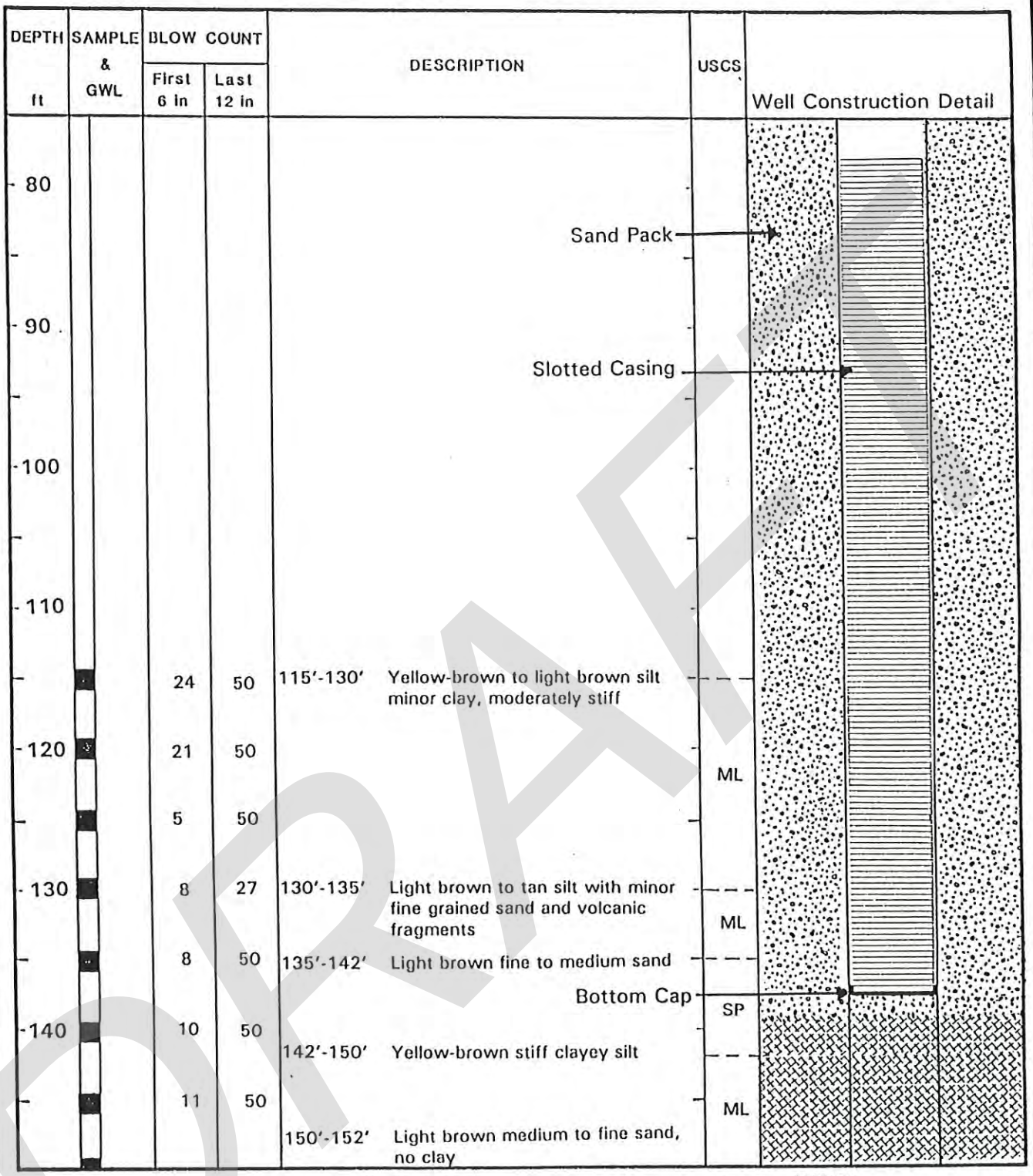
DRAFT

Brown Street Landfill
City of Vacaville

LOG OF BORING NO. B-2

BALBI & CHANG ASSOCIATES
Geotechnical Consultants / Materials Testing

PROJECT NO.	2333-1	DATE	5-13-94
PREPARED BY	CH/DAR	PLATE	4



Date Drilled: 4-13-94

Brown Street Landfill
City of Vacaville

LOG OF BORING NO. B-2

BALBI & CHANG ASSOCIATES
Geotechnical Consultants / Materials Testing

PROJECT NO. 2333-1 | DATE 5-13-94.

PREPARED BY CH/DAR | PLATE 4

DRAFT

DEPTH ft	SAMPLE & GWL	BLOW COUNT First 6 in	BLOW COUNT Last 12 in	DESCRIPTION	USCS	Well Construction Detail
		10	50	152'-156' Red to red-brown stiff clayey silt	SP	
		10	50	Boring terminated at 156.5'	ML	
-160						

Slotted Casing | Cement/Grout

Blank Casing | Sand Pack

Date Drilled: 4-13-94

Brown Street Landfill
City of Vacaville

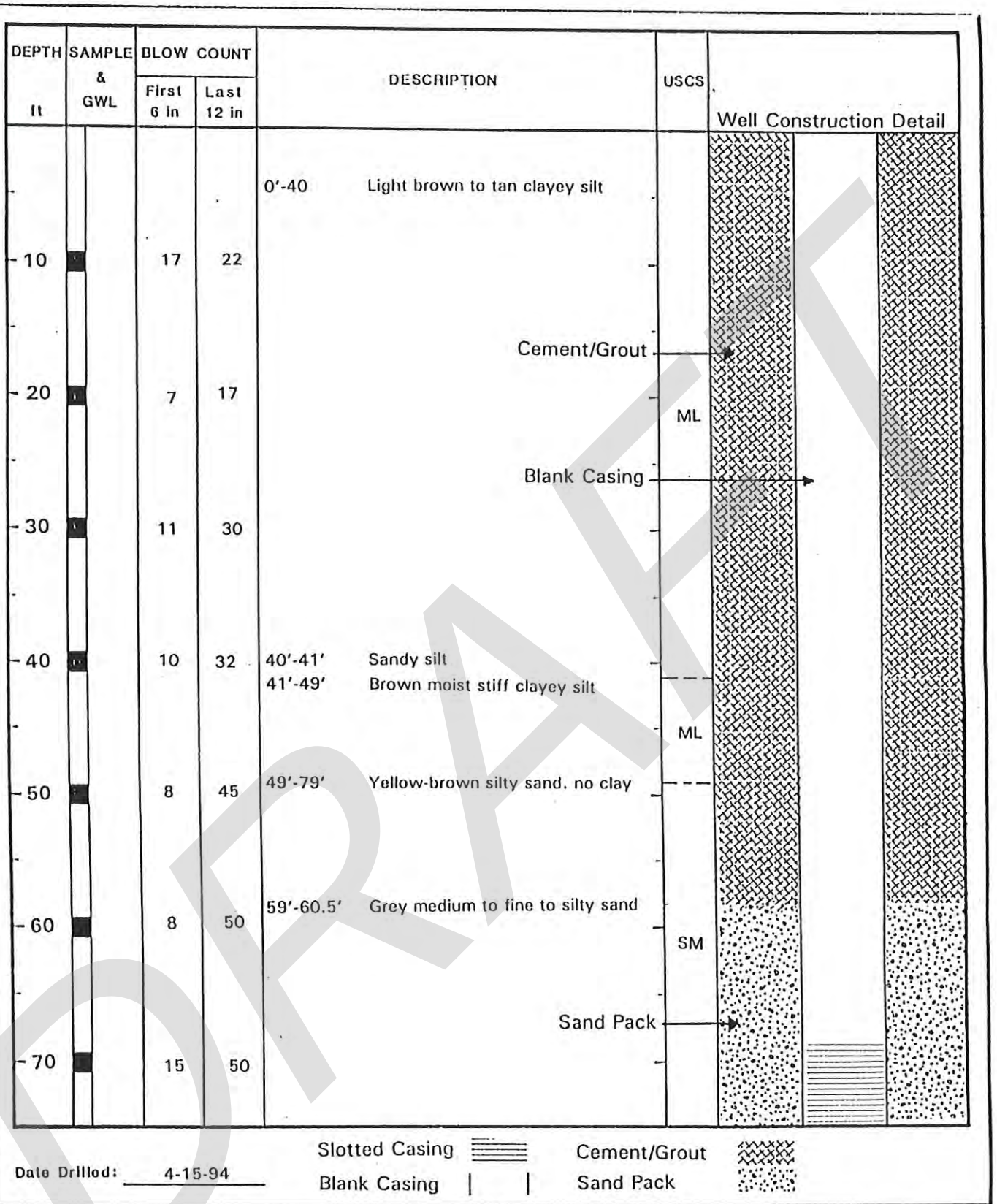
LOG OF BORING NO. B-2

BALBI & CHANG ASSOCIATES
Geotechnical Consultants / Materials Testing

PROJECT NO. 2333-1 | DATE 5-13-94.

PREPARED BY CH/DAR | PLATE 4

DRAFT



Date Drilled: 4-15-94

Brown Street Landfill
City of Vacaville

LOG OF BORING NO. B-3

BALBI & CHANG ASSOCIATES
Geotechnical Consultants / Materials Testing

PROJECT NO.	2333-1	DATE	5-13-94
PREPARED BY	CH/DAR	PLATE	5

DRAFT

DEPTH ft	SAMPLE & GWL	BLOW COUNT First 6 in	BLOW COUNT Last 12 in	DESCRIPTION	USCS	Well Construction Detail
80		35	50	79'-84' Fine to medium sand; 10% coarse grains	SM	
		7	50	84'-94' Grey to brown sand size to small gravel pebbles	SP	
90		11			SP/GP	
		8	50	94'-110' Brown to tan silty sand		Slotted Casing
100		10	50		SM	
		10	30			
110		5	20	Boring terminated at 110.5'		Bottom Cap

Date Drilled: 4-15-94

Slotted Casing | Blank Casing | Cement/Grout | Sand Pack

DRAFT

Brown Street Landfill
City of Vacaville

LOG OF BORING NO. B-3

BALBI & CHANG ASSOCIATES
Geotechnical Consultants / Materials Testing

PROJECT NO. 2333-1 | DATE 5-13-94

PREPARED BY CH/DAR | PLATE 5

APPENDIX A

ANALYTICAL RESULTS

DRAFT

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

DRAFT

05/20/94

Dear Dean:

Enclosed are:

1). the results of 1 samples from your # 2333-2; Brown St. Landfill project,

2). a QC report for the above samples, and

3). a copy of the chain of custody.

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

McCAMPBELL ANALYTICAL
110 2ND AVE. SOUTH, #D7
PACHECO, CA 94553

ATTN: EDWARD HAMILTON
CLIENT PROJ. ID: 2385
CLIENT PROJ. NAME: B/BSL

REPORT DATE: 05/27/94
DATE(S) SAMPLED: 05/12/94
DATE RECEIVED: 05/13/94
AEN WORK ORDER: 9405173

PROJECT SUMMARY:

On May 13, 1994, this laboratory received 1 water sample(s).

Client requested the sample be analyzed for inorganic and organic parameters. Sample identification, methodologies, results and dates analyzed are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.

Larry Klein
General Manager

DRAFT

McCAMPBELL ANALYTICAL

SAMPLE ID: B-1
AEN LAB NO: 9405173-01
AEN WORK ORDER: 9405173
CLIENT PROJ. ID: 2385

DATE SAMPLED: 05/12/94
DATE RECEIVED: 05/13/94
REPORT DATE: 05/27/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Alkalinity, Total	EPA 310.1	380 *	2	mg CaCO3/L	05/20/94
Bicarbonate Alkalinity	EPA 310.1	380 *	2	mg CaCO3/L	05/20/94
Chemical Oxygen Demand	EPA 410.4	ND	20	mg O2/L	05/20/94
Total Dissolved Solids	EPA 160.1	830 *	10	mg/L	05/18/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	05/13/94
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	05/13/94
#Anion Sample Prep.		-		Prep date	05/13/94
Biochemical Oxygen Demand	EPA 405.1	ND	6	mg/L	05/14/94
Chloride	EPA 300	87 *	0.5	mg/L	05/13/94
Nitrate-Nitrogen	EPA 300	29 *	0.1	mg/L	05/13/94
VOCs by EPA 624	EPA 624				
Benzene	71-43-2	ND	5	ug/L	05/18/94
Bromodichloromethane	75-27-4	ND	5	ug/L	05/18/94
Bromoform	75-25-2	ND	5	ug/L	05/18/94
Bromomethane	74-83-9	ND	10	ug/L	05/18/94
Carbon Tetrachloride	56-23-5	ND	5	ug/L	05/18/94
Chlorobenzene	108-90-7	ND	5	ug/L	05/18/94
Chloroethane	75-00-3	ND	10	ug/L	05/18/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	05/18/94
Chloroform	67-66-3	ND	5	ug/L	05/18/94
Chloromethane	74-87-3	ND	10	ug/L	05/18/94
Dibromochloromethane	124-48-1	ND	5	ug/L	05/18/94
1,2-Dichlorobenzene	95-50-1	ND	5	ug/L	05/18/94
1,3-Dichlorobenzene	541-73-1	ND	5	ug/L	05/18/94
1,4-Dichlorobenzene	106-46-7	ND	5	ug/L	05/18/94
1,1-Dichloroethane	75-34-3	ND	5	ug/L	05/18/94
1,2-Dichloroethane	107-06-2	ND	5	ug/L	05/18/94
1,1-Dichloroethene	75-35-4	ND	5	ug/L	05/18/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	05/18/94
1,2-Dichloropropane	78-87-5	ND	5	ug/L	05/18/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	05/18/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	05/18/94

DRAFT

McCAMPBELL ANALYTICAL

SAMPLE ID: B-1
AEN LAB NO: 9405173-01
AEN WORK ORDER: 9405173
CLIENT PROJ. ID: 2385

DATE SAMPLED: 05/12/94
DATE RECEIVED: 05/13/94
REPORT DATE: 05/27/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Ethylbenzene	100-41-4	ND	5	ug/L	05/18/94
Methylene Chloride	75-09-2	ND	5	ug/L	05/18/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	05/18/94
Tetrachloroethene	127-18-4	ND	5	ug/L	05/18/94
Toluene	108-88-3	ND	5	ug/L	05/18/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	05/18/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	05/18/94
Trichloroethene	79-01-6	ND	5	ug/L	05/18/94
Trichlorofluoromethane	75-69-4	ND	5	ug/L	05/18/94
Vinyl Chloride	75-01-4	ND	10	ug/L	05/18/94
CCR 17 Metals					
Ag Silver	EPA 6010	ND	0.005	mg/L	05/15/94
As Arsenic	EPA 7060	0.005 *	0.002	mg/L	05/16/94
Ba Barium	EPA 6010	0.15 *	0.05	mg/L	05/15/94
Be Beryllium	EPA 6010	ND	0.002	mg/L	05/15/94
Cd Cadmium	EPA 6010	ND	0.005	mg/L	05/15/94
Co Cobalt	EPA 6010	ND	0.005	mg/L	05/15/94
Cr Chromium	EPA 6010	0.01 *	0.01	mg/L	05/15/94
Cu Copper	EPA 6010	ND	0.01	mg/L	05/15/94
Hg Mercury	EPA 7470	ND	0.0002	mg/L	05/16/94
Mo Molybdenum	EPA 6010	ND	0.01	mg/L	05/15/94
Ni Nickel	EPA 6010	0.02 *	0.01	mg/L	05/15/94
Pb Lead	EPA 6010	ND	0.04	mg/L	05/15/94
Sb Antimony	EPA 6010	ND	0.02	mg/L	05/15/94
Se Selenium	EPA 7740	ND	0.004	mg/L	05/16/94
Tl Thallium	EPA 6010	ND	0.1	mg/L	05/15/94
V Vanadium	EPA 6010	0.016 *	0.005	mg/L	05/15/94
Zn Zinc	EPA 6010	0.02 *	0.005	mg/L	05/15/94
#Extraction for BNAs	EPA 3520	-		Extrn Date	05/16/94
SEMI-VOCs by EPA 625	EPA 625				
Acenaphthene	83-32-9	ND	10	ug/L	05/19/94
Acenaphthylene	208-96-8	ND	10	ug/L	05/19/94
Anthracene	120-12-7	ND	10	ug/L	05/19/94
Benzidine	92-87-5	ND	10	ug/L	05/19/94
Benzo(a)anthracene	56-55-3	ND	10	ug/L	05/19/94
Benzo(b)fluoranthene	205-99-2	ND	10	ug/L	05/19/94
Benzo(k)fluoranthene	207-08-9	ND	10	ug/L	05/19/94
Benzo(g,h,i)perylene	191-24-2	ND	10	ug/L	05/19/94
Benzo(a)pyrene	50-32-8	ND	10	ug/L	05/19/94
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/L	05/19/94

DRAFT

McCAMPBELL ANALYTICAL

SAMPLE ID: B-1
AEN LAB NO: 9405173-01
AEN WORK ORDER: 9405173
CLIENT PROJ. ID: 2385

DATE SAMPLED: 05/12/94
DATE RECEIVED: 05/13/94
REPORT DATE: 05/27/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Bis(2-chloroethyl) Ether	111-44-4	ND	10	ug/L	05/19/94
Bis(2-chloroisopropyl) Ether	108-60-1	ND	10	ug/L	05/19/94
Bis(2-ethylhexyl) Phthalate	117-81-7	ND	10	ug/L	05/19/94
4-Bromophenyl Phenyl Ether	101-55-3	ND	10	ug/L	05/19/94
Butylbenzyl Phthalate	85-68-7	ND	10	ug/L	05/19/94
2-Chloronaphthalene	91-58-7	ND	10	ug/L	05/19/94
4-Chlorophenyl Phenyl Ether	7005-72-3	ND	10	ug/L	05/19/94
Chrysene	218-01-9	ND	10	ug/L	05/19/94
Dibenzo(a,h)anthracene	53-70-3	ND	10	ug/L	05/19/94
D-n-butyl Phthalate	84-74-2	ND	10	ug/L	05/19/94
1,2-Dichlorobenzene	95-50-1	ND	10	ug/L	05/19/94
1,3-Dichlorobenzene	541-73-1	ND	10	ug/L	05/19/94
1,4-Dichlorobenzene	106-46-7	ND	10	ug/L	05/19/94
3,3'-Dichlorobenzidine	91-94-1	ND	20	ug/L	05/19/94
Diethyl Phthalate	84-66-2	ND	10	ug/L	05/19/94
Dimethyl Phthalate	131-11-3	ND	10	ug/L	05/19/94
2,4-Dinitrotoluene	121-14-2	ND	10	ug/L	05/19/94
2,6-Dinitrotoluene	606-20-2	ND	10	ug/L	05/19/94
D-n-octyl Phthalate	117-84-0	ND	10	ug/L	05/19/94
Fluoranthene	206-44-0	ND	10	ug/L	05/19/94
Fluorene	86-73-7	ND	10	ug/L	05/19/94
Hexachlorobenzene	118-74-1	ND	10	ug/L	05/19/94
Hexachlorobutadiene	87-68-3	ND	10	ug/L	05/19/94
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/L	05/19/94
Hexachloroethane	67-72-1	ND	10	ug/L	05/19/94
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10	ug/L	05/19/94
Isophorone	78-59-1	ND	10	ug/L	05/19/94
Naphthalene	91-20-3	ND	10	ug/L	05/19/94
Nitrobenzene	98-95-3	ND	10	ug/L	05/19/94
N-Nitrosodimethylamine	62-75-9	ND	10	ug/L	05/19/94
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/L	05/19/94
N-Nitroso-di-n-propylamine	621-64-7	ND	10	ug/L	05/19/94
Phenanthrene	85-01-8	ND	10	ug/L	05/19/94
Pyrene	129-00-0	ND	10	ug/L	05/19/94
1,2,4-Trichlorobenzene	120-82-1	ND	10	ug/L	05/19/94
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/L	05/19/94
2-Chlorophenol	95-57-8	ND	10	ug/L	05/19/94
2,4-Dichlororophenol	120-83-2	ND	10	ug/L	05/19/94
2,4-Dimethylphenol	105-67-9	ND	10	ug/L	05/19/94
4,6-Dinitro-2-methylphenol	534-52-1	ND	50	ug/L	05/19/94
2,4-Dinitrophenol	51-28-5	ND	50	ug/L	05/19/94
2-Nitrophenol	88-75-5	ND	10	ug/L	05/19/94
4-Nitrophenol	100-02-7	ND	50	ug/L	05/19/94

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McCAMPBELL ANALYTICAL

SAMPLE ID: B-1
AEN LAB NO: 9405173-01
AEN WORK ORDER: 9405173
CLIENT PROJ. ID: 2385

DATE SAMPLED: 05/12/94
DATE RECEIVED: 05/13/94
REPORT DATE: 05/27/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Pentachlorophenol	87-86-5	ND	50	ug/L	05/19/94
Phenol	108-95-2	ND	10	ug/L	05/19/94
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/L	05/19/94

ND = Not detected at or above the reporting limit
* = Value above reporting limit

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AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9405173

CLIENT PROJECT ID: 2385

Quality Control Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

The following abbreviations are found throughout the QC report:

ND = Not Detected at or above the reporting limit
RPD = Relative Percent Difference
< = Less Than

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QUALITY CONTROL DATA

INSTRUMENT: 12

AEN JOB NO: 9405173

CLIENT PROJ. ID: 2385

SURROGATE STANDARD RECOVERY SUMMARY
METHOD: EPA 624
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)		
Date Analyzed	Sample Id.	Lab Id.	1,2-Dichloroethane-d_4	Toluene-d_8	p-Bromofluorobenzene
05/18/94	B-1	01	104	100	101

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CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
1,2-Dichloroethane-d_4	(77-123)
Toluene-d_8	(90-108)
p-Bromofluorobenzene	(89-109)

QUALITY CONTROL DATA

DATE ANALYZED: 05/18/94
SAMPLE SPIKED: 9405114-01
CLIENT PROJ. ID: 2385

AEN JOB NO: 9405173
INSTRUMENT: 12

MATRIX SPIKE RECOVERY SUMMARY
METHOD: EPA 624
(WATER MATRIX)

ANALYTE	Spike Added (ug/L)	Average Percent Recovery	RPD
1,1-Dichloroethene	50.0	108	7
Trichloroethene	50.0	100	5
Benzene	50.0	114	3
Toluene	50.0	105	2
Chlorobenzene	50.0	99	3

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(81-123)	12
Trichloroethene	(87-112)	9
Benzene	(92-116)	12
Toluene	(91-116)	12
Chlorobenzene	(92-113)	10

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

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QUALITY CONTROL DATA

DATE EXTRACTED: 05/16/94

AEN JOB NO: 9405173

CLIENT PROJ. ID: 2385

INSTRUMENT: 11

SURROGATE STANDARD RECOVERY SUMMARY
METHOD: EPA 625
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)					
Date Analyzed	Sample Id.	Lab Id.	Nitro-benzene-d_5	2-Fluoro-biphenyl	Terphenyl-d_{14}	Phenol-d_5	2-Fluoro-phenol	2,4,6-Tribromo-phenol
05/19/94	B-1	01	96	92	106	101	61	67

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
Nitrobenzene-d_5	(47-104)
2-Fluorobiphenyl	(49-106)
Terphenyl-d_{14}	(36-138)
Phenol-d_5	(46-105)
2-Fluorophenol	(40- 97)
2,4,6-Tribromophenol	(37-145)

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QUALITY CONTROL DATA

DATE EXTRACTED: 05/16/94
DATE ANALYZED: 05/23/94
CLIENT PROJ. ID: 2385

AEN JOB NO: 9405173
SAMPLE SPIKED: DI WATER
INSTRUMENT: 11

METHOD SPIKE RECOVERY SUMMARY
METHOD: EPA 625
(WATER MATRIX)

ANALYTE	Spike Added (ug/L)	Average Percent Recovery	RPD
Phenol	200	93	4
2-Chlorophenol	200	110	4
1,4-Dichlorobenzene	204	88	2
N-Nitroso-di-n-propylamine	199	87	<1
1,2,4-Trichlorobenzene	200	64	<1
4-Chloro-3-methylphenol	196	76	4
Acenaphthene	200	92	2
4-Nitrophenol	198	77	3
2,4-Dinitrotoluene	200	78	2
Pentachlorophenol	203	80	8
Pyrene	199	80	6

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
Phenol	(12-110)	42
2-Chlorophenol	(27-123)	40
1,4-Dichlorobenzene	(36- 97)	28
4-Nitroso-di-n-propylamine	(41-116)	38
1,2,4-Trichlorobenzene	(39- 98)	28
4-Chloro-3-methylphenol	(23- 97)	42
Acenaphthene	(46-118)	31
4-Nitrophenol	(10- 80)	50
2,4-Dinitrotoluene	(24- 96)	38
Pentachlorophenol	(9-103)	50
Pyrene	(26-127)	31

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

DRAFT

QUALITY CONTROL DATA

MATRIX: WATER

AEN JOB NO: 9405173

CLIENT PROJ. ID: 2385

DATE(S) ANALYZED: 05/15-20/94

MATRIX SPIKE RECOVERY SUMMARY

Compound	Inst./ Method	Sample Spiked	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits % Rec. Limit	QC Limits RPD Limit
Ag, Silver	ICP/6010	9405146-02	0.25	100	<1	78-111	9
As, Arsenic	4000/7060	9405146-02	0.04	71	1	59-149	13
Ba, Barium	ICP/6010	9405146-02	2.0	91	<1	83-108	5
Be, Beryllium	ICP/6010	9405146-02	0.05	88	<1	64-104	7
Cd, Cadmium	ICP/6010	9405146-02	0.25	91	3	64-128	15
Co, Cobalt	ICP/6010	9405146-02	0.5	90	<1	74-121	6
Cr, Chromium	ICP/6010	9405146-02	0.2	91	4	75-114	7
Cu, Copper	ICP/6010	9405146-02	0.25	90	<1	81-114	5
Hg, Mercury	Hg/7470	9405076-26	2.0 ug/L	96	2	80-120	15
Mo, Molybdenum	ICP/6010	9405146-02	0.2	96	1	76-119	7
Ni, Nickel	ICP/6010	9405146-02	0.5	88	<1	77-113	5
Pb, Lead	ICP/6010	9405146-02	0.5	90	1	80-115	7
Sb, Antimony	ICP/6010	9405146-02	0.5	89	2	79-116	8
Se, Selenium	4000/7740	9405146-02	0.08	24	6	0-147	20
Tl, Thallium	ICP/6010	9405146-02	0.5	90	6	67-116	7
V, Vanadium	ICP/6010	9405146-02	0.5	93	<1	77-114	6
Zn, Zinc	ICP/6010	9405146-02	0.5	89	1	68-116	7
COD	NOVASPEC/410.4	9405173-01	333	106	6	80-120	15

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QUALITY CONTROL DATA

MATRIX: WATER

AEN JOB NO: 9405173

CLIENT PROJ. ID: 2385

DATE(S) ANALYZED: 05/13-20/94

METHOD SPIKE RECOVERY SUMMARY

Compound	Inst./ Method	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits % Rec. Limit	QC Limits RPD Limit
Ag, Silver	ICP/6010	0.25	113	<1	64-122	8
As, Arsenic	4000/7060	0.04	100	3	90-115	12
Ba, Barium	ICP/6010	2.0	102	<1	85-116	5
Be, Beryllium	ICP/6010	0.05	97	1	76-107	6
Cd, Cadmium	ICP/6010	0.25	101	3	78-119	10
Co, Cobalt	ICP/6010	0.5	104	1	89-116	6
Cr, Chromium	ICP/6010	0.2	103	1	87-117	8
Cu, Copper	ICP/6010	0.25	100	<1	85-113	6
Hg, Mercury	Hg/7470	2.0 ug/L	100	1	80-120	15
Mo, Molybdenum	ICP/6010	0.2	107	<1	86-120	6
Ni, Nickel	ICP/6010	0.5	102	<1	88-116	6
Pb, Lead	ICP/6010	0.5	102	<1	87-119	7
Sb, Antimony	ICP/6010	0.5	97	<1	82-123	8
Se, Selenium	4000/7740	0.08	91	3	80-114	14
Tl, Thallium	ICP/6010	0.5	101	4	77-119	9
V, Vanadium	ICP/6010	0.5	103	<1	89-114	5
Zn, Zinc	ICP/6010	0.5	101	1	87-117	7
BOD	ORION/405.1	198	91	3	85-115	20
Chloride	DIONEX/300	5.0	92	<1	80-120	15
COD	NOVASPEC/410.4	103	92	5	80-120	15
Nitrate-N	DIONEX/300	1.0	91	<1	80-120	15

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

*** END OF REPORT ***

DRAFT

2333 - ABANDONED

BALBI & CHANG ASSOCIATES

151 Link Rd., Cordelia, CA 94585 (707) 864-2020 Fax: (707) 864-8886

projects

Chain of Custody

DATE 5-13-94 PAGE 1 OF 1

SHIP TO: McCampbell
110 2nd Ave. South, Suite #D-7
Pacheco, CA 94553

SAMPLERS (SIGNATURE) Chuck Headlee

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	TPH - Gasoline (EPA 5030)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510, 3550, 8015	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240) Halocarbons	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270) Semi Volatile	TOTAL OIL & GREASE (EPA 5520 D&F)	PESTICIDES/PCB (EPA 608, 8080)	PHENOLS (EPA 604, 8040)	COD	BOD	METALS: Cd, Cr, Pb, Zn	CAM METALS (18) w/Cr VI	PRIORITY POLLUTANT METALS (13)	CCR 17 (Cap Metals plus AA for Hg+Se	Cl⁻, NO_3	Alkalinity, TDS	bicarbonate		NUMBER OF CONTAINERS
B-1	5-12-94	4pm	water							X	X				X	X				X	X	X	X		

PROJECT INFORMATION

PROJECT NAME: Brown St. Landfill
PROJECT NUMBER: 2333-2
PROJECT MANAGER: Dean Richesin

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
REC'D GOOD CONDITION/COLD	✓
CONFORMS TO RECORD	✓
LAB NO.	1644

SPECIAL INSTRUCTIONS/COMMENTS:

VOAS O&G METALS OTHER
PRESERVATIVE
APPROPRIATE
CONTAINERS

...EAD SPACE ABSENT ✓
...OOD CONDITION ✓

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Chuck Headlee 8:45 (TIME)	(SIGNATURE) J R Hamilton 9:15 (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Chuck Headlee 5-13-94 (DATE)	(PRINTED NAME) J R Hamilton 5-13-94 (DATE)	(PRINTED NAME) (DATE)
(COMPANY) Balbi and Chang	(COMPANY) McCampbell	(COMPANY)
RECEIVED BY 1.	RECEIVED BY 2.	RECEIVED BY (LABORATORY) 3.
(SIGNATURE) J R Hamilton 5:45 (TIME)	(SIGNATURE) Heidi Ricca 9:15 (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) J R Hamilton 5-13-94 (DATE)	(PRINTED NAME) Heidi Ricca 5-13-94 (DATE)	(PRINTED NAME) (DATE)
(COMPANY) McCampbell	(COMPANY) McCampbell	(LAB)

CHAIN OF CUSTODY RECORD

McCAMPBELL ANALYTICAL
110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-1622

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

REPORT TO: Ed Hamilton BILL TO: McCampbell

PROJECT NUMBER: 2385 PROJECT NAME: B/BSL

PROJECT LOCATION: SAMPLER SIGNATURE:

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCL	HNO3	OTHER ICE
B-1	5-12-94	5-12-94	4pm	8		X							X

ANALYSIS REQUEST

BTEX & TPH as Gasoline (602/8020 & 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E/B/F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs ONLY	EPA 624/8240/8260 Chlorinated Volatiles	EPA 625/8270 Semi Volatile Organics	CAM - 17 Metals CCR 17 ICAP Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	Cl⁻, NO3	OTHER: COD	BOD	ALKALinity, TDS	BICARBONATE	COMMENTS: PLUS AA for Hg and Se
—	—	—	—	—	—	—	—	X	X	X	—	—	—	X	X	X	X	X	01A-H

RELINQUISHED BY	DATE	TIME	RECEIVED BY
[signature]	5-13-94	9:30	[signature]
RELINQUISHED BY: [signature]	DATE 5-13-94	TIME 9:45	RECEIVED BY:
RELINQUISHED BY:	DATE 5-13-94	TIME 0947	RECEIVED BY LABORATORY: [signature]

REMARKS:
Short Hold Times on BOD
And Nitrate

BALBI & CHANG ASSOCIATES
151 LINK ROAD
CORDELIA, CA 94585

WELL SAMPLING FIELD DATA SHEET

FIELD

PROJECT NAME BROWN ST LANDFILL JOB # 2333-N
LOCATION _____ DATE 5/12/94
CITY _____ TIME _____

WELL I.D. B-1
WELL DIAMETER 2 in
TOTAL DEPTH 10.0 ft
DEPTH TO LIQUID - 92.5 ft

WELL CONDITION _____
HYDROCARBON THICKNESS _____
HYDROCARBON SHEEN PRESENT (Y/N) _____

Volume Factor (VF)	2" = 0.17	6" = 1.50	10" = 4.10
	3" = 0.38	8" = 2.60	12" = 5.80
	4" = 0.66		

LIQUID COLUMN HEIGHT = 8.5 x 4 (# of casing volumes) x 0.17 (VF) = 6 gal. (Estimated Purge Volume)

PURGING EQUIPMENT _____

SAMPLING EQUIPMENT _____

STARTING TIME _____ PURGING FLOW RATE _____ gpm

(Estimated Purge Volume) _____ gal. / (Purging Flow Rate) _____ gpm = (Anticipated Purging Time) _____ min

TIME	pH	CONDUCTIVITY (X1000)	TEMPERATURE	VOLUME
	6.3	1.54	74	2
	8.8	1.38	75	4
	7.8	1.37	78	6

Did Well Dewater? _____ If Yes, Time _____ Volume _____
Sampling Time _____ Weather Conditions _____
Analysis _____ Bottles Used _____
Chain-of-Custody Number (if available) _____

Comments _____

Project Engineer _____

Sampling Technician GMa

DRAFT

APPENDIX B

DAILY FIELD REPORTS (BCA)

DAILY DRILLING REPORTS (LAYNE)

DRAFT

FIELD DAILY REPORT

BALBI & CHANG ASSOCIATES
151 Link Road, Cordelia, CA 94585
(707) 864-2020

Prepared by: C. Headlee

Date: 4/-8-94 Time: _____ Mileage: _____ Weather: warm dry

File No: 2333-1 Project: Bvn. St. LF

Services Requested By: City of Vacaville Type of Services: logging

Describe observation made, including corrected items:

Arrived job site at 8 am pickup
met w/ Dean & Bob Collison
- 9a.m. start drilling lunch 1 hr
logged at 5' intervals
Rob & Doug Pease (Vacaville Public Works)
came out at 2-2:30. Rob wants to
log at 10' intervals - we decided to stay
at 5'
- 3:30 indicating of water 95-100'
- 4 pm at 100' - pack off & will check water level
in the morning
- 4:30 left the site

FIELD DENSITY TEST: [ ]; Total # _____; # of Passing tests: _____; # of Failed tests: _____;

List items requiring correction, and previously listed uncorrected items:

Comments: _____

REMINDER !!! *Request for services MUST be scheduled through our office (707) 864-2020 by 4 P.M. the day before service is needed. MINIMUM CHARGE for field services is 2 hours; thereafter is in 2 hours increments.*

DRAFT

FIELD DAILY REPORT

BALBI & CHANG ASSOCIATES
151 Link Road, Cordelia, CA 94585
(707) 864-2020

Prepared by: 4-11-94 CTH

Date: 4-11-94 Time: _____ Mileage: _____ Weather: _____

File No: 2333-1 Project: Brn. St. LF

Services Requested By: City of Vacaville Type of Services: logging

Describe observation made, including corrected items:

Arrived job site at 8am
Rob + Dean - discuss options - continue down + sample at 5' intervals
- lunch ½ hr
- drilling continues - Rob said stop at end of day even if only at 145'.
- 145' at 5pm - will sample at 145 (5:25p)
- augers up to 103'
- cement to bottom of auger
- finish cementing at 8pm

FIELD DENSITY TEST: [ ]: Total # _____; # of Passing tests: _____; # of Failed tests: _____;

List items requiring correction, and previously listed uncorrected items:

-4-12-94
7:45 met w/ Dean + Rhil
on site at 8:45
B-1 water depth 100'
Cement at 103.5
hole completed - slots stuck at 98' to 78'
sand to 68'

Comments: _____

REMINDER !!! *Request for services MUST be scheduled through our office (707) 864-2020 by 4 P.M. the day before service is needed. MINIMUM CHARGE for field services is 2 hours; thereafter is in 2 hours increments.*

DRAFT

FIELD DAILY REPORT

BALBI & CHANG ASSOCIATES
151 Link Road, Cordelia, CA 94585
(707) 864-2020

Prepared by: C. Headlee

Date: 4-12-94 Time: _____ Mileage: _____ Weather: warm/dry

File No: 2333-1 Project: Brk. St. LF

Services Requested By: City of Vacaville Type of Services: logging

Describe observation made, including corrected items:

Arrived job site at
7:45 met w/ Dean & Phil to discuss the project
8:45 on site
water level at 100'
well installed, slot 98'-78'
sand to 68'
grout & set monument (& didn't witness this part)

FIELD DENSITY TEST: [ ]; Total # _____; # of Passing tests: _____; # of Failed tests: _____;

List items requiring correction, and previously listed uncorrected items:

Comments: _____

REMINDER !!! *Request for services MUST be scheduled through our office (707) 864-2020 by 4 P.M. the day before service is needed. MINIMUM CHARGE for field services is 2 hours; thereafter is in 2 hours increments.*

DRAFT

FIELD DAILY REPORT

BALBI & CHANG ASSOCIATES
151 Link Road, Cordelia, CA 94585
(707) 864-2020

Prepared by: C. Headlee

Date: 4-13-94 Time: _____ Mileage: _____ Weather: sunny

File No: 2333-1 Project: Brown Street Landfill

Services Requested By: City of Vacaville Type of Services: logging

Describe observation made, including corrected items:

Arrived job site at 10:20 am
driller down the hole, had collected sample at 115 and 120 (just pulled 120 sample out as I arrived - core barrels dry)

at 135' slight moisture on sampler - break for lunch - check for water before going back in the hole

- at 1pm - tested for water - hole is dry - going to drill to 155'-160' - Rob + Dean will decide

-2pm - measured wt depth at B-1 93 feet
-3:30 TD - 156' will cement to 140' slotted casing tomorrow

FIELD DENSITY TEST: [ ]; Total # _____; # of Passing tests: _____; # of Failed tests: to 78';

List items requiring correction, and previously listed uncorrected items:

- 3 pm Rob Colbiaga came out and said he had talked with Dean but had decided that he wants to cement from 156-140' then hang 60' of slotted casing 138-78'. He is aware that Dean recommended against this idea.

- left site at 4:30 as the driller was starting to cement the lower portion of the hole.

Comments: _____

REMINDER !!! *Request for services MUST be scheduled through our office (707) 864-2020 by 4 P.M. the day before service is needed. MINIMUM CHARGE for field services is 2 hours; thereafter is in 2 hours increments.*

DRAFT

FIELD DAILY REPORT

BALBI & CHANG ASSOCIATES
151 Link Road, Cordelia, CA 94585
(707) 864-2020

Prepared by: C. Headley

Date: 4-14-94 Time: _____ Mileage: _____ Weather: _____

File No: 2333-1 Project: Brown St. Landfill

Services Requested By: City of Vacaville Type of Services: logging

Describe observation made, including corrected items:

Arrived job site at 8 am
Tried to locate water - hole is dry
cement at 140.5'
driller setting 60' of casing (slotted)
sanding and cementing
I left site at ~~noon~~ (9:30 am) will return after lunch.

- driller set at 140' (.5' sand below pipe)
- slots 140'-80' sand to 70'

after lunch - driller going to store to get more cement so he can set the monuments.

FIELD DENSITY TEST: [ ]; Total # _____; # of Passing tests: _____; # of Failed tests: _____;

List items requiring correction, and previously listed uncorrected items:

- monument set - off site at 2:30 pm
- 3 pm set up, and getting started on B-3
- drill to 39', and stop - 4:05 pm
- driller needs more supplies will start again on Friday morning
- left field at 4:45 pm

Comments: _____

REMINDER !!! Request for services MUST be scheduled through our office (707) 864-2020 by 4 P.M. the day before service is needed. MINIMUM CHARGE for field services is 2 hours; thereafter is in 2 hours increment

DRAFT

FIELD DAILY REPORT

BALBI & CHANG ASSOCIATES
151 Link Road, Cordelia, CA 94585
(707) 864-2020

Prepared by: D Richesin

Date: 4-15-94 Time: _____ Mileage: _____ Weather: warm, dry

File No: 2333-1 Project: Brown St. Landfill

Services Requested By: City of Vacaville Type of Services: logging

Describe observation made, including corrected items:

Arrived job site at 8AM
- Layne-Western drilling on boring B-3C 39 ft.
- drilled to 110.5 ft.
- break 11:45 - 12:30 lunch
- end boring @ 110.5 ft. @ 1:45; started casing and bailed hole
- begin setting casing @ 2:00, set sand bottom 2' + 108 to 98'
- begin cementing 4:00
- DBA left 4:15

0-40' solid
78-108 slotted

DTW: B-1 92.3' bel. grd surf.
B-2 dry
B-3 dry.

FIELD DENSITY TEST: [ ]; Total # _____; # of Passing tests: _____; # of Failed tests: _____;

List items requiring correction, and previously listed uncorrected items:

10 drums @ B-3

13 drums @ B-1

7 drums @ B-2

Comments: _____

REMINDER !!! *Request for services MUST be scheduled through our office (707) 864-2020 by 4 P.M. the day before service is needed. MINIMUM CHARGE for field services is 2 hours; thereafter is in 2 hours increments.*

DRAFT

FIELD DAILY REPORT

BALBI & CHANG ASSOCIATES
151 Link Road, Cordelia, CA 94585
(707) 864-2020

Prepared by: DAK

Date: 4/18/94 Time: _____ Mileage: _____ Weather: clear, warm

File No: 2333-1 Project: Brown St. LFill

Services Requested By: City Vacaville Type of Services: _____

Describe observation made, including corrected items:

Arrived job site at 11:30 AM Bill Hagata there; discussed his work @ site — he was shutting wells and bailed B-1 & B-2. B-2 & B-3 were "dry". Data made from Bill H. to deliver to Rob C.

3:00 - visited Rob C. @ Vacaville offices
- received map - typo - @ site
- gave Rob C. keys to wells
- gave Rob SCAT operating procedure document
- provided proposal clarification re: GW sampling

FIELD DENSITY TEST: [ ]; Total # _____; # of Passing tests: _____; # of Failed tests: _____;

List items requiring correction, and previously listed uncorrected items:

to analysis in next couple of days

Comments: _____

REMINDER !!! *Request for services MUST be scheduled through our office (707) 864-2020 by 4 P.M. the day before service is needed. MINIMUM CHARGE for field services is 2 hours; thereafter is in 2 hours increments.*

DRAFT

LAYNE-WESTERN COMPANY

DRILLER'S DAILY DRILL REPORT

ACCOUNTING FOR DAILY ACTIVITY BY ITEM

ITEM #	DESCRIPTION OF ITEM	HOURS
1	Mob: 2 Demob: 2 _____ miles	2
2	Daily travel to the field _____ miles	
3	Orientation Safety Mtg. Rig Up Dn.	
4	Drilling (hammer) (_____ hrs. Rotary Conversion)	
5	Drilling (rotary).	
6	Drilling (auger).	7.5
7	Drilling (connd).	
8	Sampling (S.SPN., Shelby, etc.)	
9	Pull out drill pipe.	
10	Abandon hole.	
11	Water testing.	
12	Clean out hole.	
13	Well construction (below grade).	
14	Decontamination.	
15	Site clean-up Spoils handling.	
16	Move between holes.	
17	Water hauling: _____ gallons	
18	Surface completion.	
19	Alignment test.	
20	Development.	
21	Work on stuck pipe.	
22	Stand by with crew.	
23	Standby without crew.	
24	Lunch —	1
25		
26		
27		
28		
29	Yard time.	
30	Scheduled Maintenance & P.M. Service.	
31	Unscheduled repairs.	

TOTAL HOURS 10

EVENTS / CONDITIONS / CHANGES

CLIENT'S COPY

PERSONNEL EMPLOYED

EMPLOYEE'S NAMES	TOTAL HOURS
DRILLER/OPER. William Foster	7
HELPER Steve Stockton	9
LABORER	
GROUTER	
DEV. RIG OPER.	
LABORER	
PROJECT MAN	
FIELD SUPER.	

EQUIPMENT EMPLOYED

DESCRIPTION	UNIT NO.
Drill Rig	413
Pipe Truck	301
Crew Truck	
Grout Plant	
Steam Cleaner	
Development Rig	
Generator	
Compressor	
Booster	
Mud Pump	
Water Truck	
Supply Truck Trailer	
Backhoe/Fork lift	

FROM / TO / ITEM

FROM	TO	ITEM #
12:00 PM	12:30 AM	
12:30 AM	1:00 AM	
1:00 AM	1:30 AM	
1:30 AM	2:00 AM	
2:00 AM	2:30 AM	
2:30 AM	3:00 AM	
3:00 AM	3:30 AM	
3:30 AM	4:00 AM	
4:00 AM	4:30 AM	
4:30 AM	5:00 AM	
5:00 AM	5:30 AM	
5:30 AM	6:00 AM	
6:00 AM	6:30 AM	15
6:30 AM	7:00 AM	6
7:00 AM	7:30 AM	
7:30 AM	8:00 AM	
8:00 AM	8:30 AM	
8:30 AM	9:00 AM	
9:00 AM	9:30 AM	
9:30 AM	10:00 AM	
10:00 AM	10:30 AM	
10:30 AM	11:00 AM	
11:00 AM	11:30 AM	
11:30 AM	12:00 N	
12:00 N	12:30 PM	
12:30 PM	1:00 PM	6
1:00 PM	1:30 PM	
1:30 PM	2:00 PM	2x5
2:00 PM	2:30 PM	2x1
2:30 PM	3:00 PM	6
3:00 PM	3:30 PM	
3:30 PM	4:00 PM	6
4:00 PM	4:30 PM	1
4:30 PM	5:00 PM	
5:00 PM	5:30 PM	
5:30 PM	6:00 PM	
6:00 PM	6:30 PM	
6:30 PM	7:00 PM	
7:00 PM	7:30 PM	
7:30 PM	8:00 PM	
8:00 PM	8:30 PM	
8:30 PM	9:00 PM	
9:00 PM	9:30 PM	
9:30 PM	10:00 PM	
10:00 PM	10:30 PM	
10:30 PM	11:00 PM	
11:00 PM	11:30 PM	
11:30 PM	12:00 PM	

DRILLING / PROJECT INFORMATION

CLIENT: Lubbock FF & Scatmanini Date 4-14 1994

DRILLING LOCATION: Uvalde Co. JOB NO 5658

								TOTALS
HOLE #		#6-D						
PREVIOUS FOOTAGE DRILLED								
FOOTAGE DRILLED THIS DATE								
SAMPLES TAKEN THIS DATE								
PROTECTIVE CASING	FROM							
	TO							
CONDUCTOR CASING	FROM							
	TO							
CEMENT SEAL	FROM	68'						
	TO	0'						
BENT SEAL	FROM	70'						
	TO	68'						
SAND PACK	FROM	140'						
	TO	70'						
BLANK CASING	FROM	0'						
	TO	60'						
SCREEN	FROM	140'						
	TO	80'						
WATER LEVEL								X
FORMATION DESCRIPTION	FROM							X
	TO							
	FROM							X
	TO							
	FROM							X
	TO							

ALL APPLICABLE HOURS, FOOTAGE, SUPPLIES, ETC. SUPPLIED ARE TO BE CONSIDERED CHARGEABLE

DRILLER/OPER. REMARKS & APPROVAL William Foster

FIELD SUPER. REMARKS & APPROVAL

CLIENTS REMARKS:

CLIENTS APPROVAL:

DRILLING SUPPLIES • CONSTRUCTION MATERIALS SAFETY EQUIPMENT • MISCELLANEOUS

QTY.	DESCRIPTION
1	8 "X 5' Steel Well Protector
	____"X____' Steel Guard Posts
2	Bags: Concrete Mix
	Flush Traffic Vault Size _____
1	Padlock: Keyed _____
21	Bags: Portland Type II Cement
	Bags: Grout-Voiclay Enviroplug
2	Pails: Bentonite Pellets-Size 3/8
	Bags: Bentonite Chips-Size _____
	Bags: Bentonite Gel Powder
32	Bags: Sand-Grade #3
	Bags: Sand-Grade _____
	Top Cap Plug: Type _____
	Low-Carbon Steel Casing Size _____
1	2 "X 5' Casing: PVC S.S.
8	2 "X 10' Casing: PVC S.S.
	____"X 5' Screen-Slot Size _____
60	2 "X 10' Screen-Slot Size .020
	Centralizers-Size _____
	____"X____' Sump
1	Bottom Caps: Threaded
5	55 Gal. Drums-17H Rated
	____" ____ Sample Liners
	____"X____' Split Spoon Bodies
	____" Blunt Spoon Shoes
	____" Steel Finger Baskets
	Visqueen Tarps 6 mil
	Drill Bits-Size _____

OF CREW WITH CHARAGEABLE PER DIEM THIS DATE 2

OF CREW UNDER LEVEL ____ PERSONAL PROTECTION THIS DATE

LAYNE ENVIRONMENTAL SERVICES, INC.

DRILLER'S DAILY DRILL REPORT

DRILLING /PROJECT INFORMATION

CLIENT: Lubhorff & Scalmanini Date 4-12 1994

DRILLING LOCATION: Vacaville Ca. JOB NO. 5659

PERSONNEL EMPLOYED

EMPLOYEE'S NAMES	TOTAL HOURS
DRILLER/OPER. William Hogate	13
HELPER Steve McCoy	13
LABORER	
GROUTER	
DEV. RIG OPER.	
LABORER	
PROJECT MAN.	
FIELD SUPER.	

EQUIPMENT EMPLOYED

DESCRIPTION	UNIT NO.
Drill Rig.	413
Pipe Truck	301
Crew Truck	
Grout Plant	
Steam Cleaner	
Development Rig.	
Generator	
Compressor	
Booster	
Mud Pump	
Water Truck	
Supply Truck Trailer	
Backhoe/Forklift	

ACCOUNTING FOR DAILY ACTIVITY BY ITEM

ITEM #	DESCRIPTION OF ITEM	HOURS
1.	Mob: ☐ Demob: ☐ _____ miles	1.0
2.	Daily travel to the field. _____ miles	
3.	Orientation/Safety Mtg. Rig Up Dn.	
4.	Drilling (hammer) (_____ hrs. Rotary Conversion).	
5.	Drilling (rotary).	
6.	Drilling (auger).	12.0
7.	Drilling (coring).	
8.	Sampling (S.SPN., Shelby, etc.)	
9.	Pull out drill pipe.	
10.	Abandon hole.	
11.	Water testing.	
12.	Clean out hole.	
13.	Well construction (below grade).	
14.	Decontamination.	
15.	Site clean-up Spoils handling.	
16.	Move between holes.	
17.	Water hauling. _____ gallons	
18.	Suface completion.	
19.	Alignment test.	
20.	Development.	
21.	Work on stuck pipe.	
22.	Stand by with crew.	
23.	Standby without crew.	
24.	Lunch —	-1.0
25.		
26.		
27.		
28.		
29.	Yard time	1.0
30.	Scheduled Maintenance & P.M. Service.	
31.	Unscheduled repairs.	
	TOTAL HOURS	14

FROM	TO	ITEM #
5:00 AM	5:30 AM	
5:30 AM	6:00 AM	
6:00 AM	6:30 AM	
6:30 AM	7:00 AM	
7:00 AM	7:30 AM	24
7:30 AM	8:00 AM	
8:00 AM	8:30 AM	29
8:30 AM	9:00 AM	6
9:00 AM	9:30 AM	6
9:30 AM	10:00 AM	
10:00 AM	10:30 AM	
10:30 AM	11:00 AM	
11:00 AM	11:30 AM	
11:30 AM	12:00 N	
12:00 N	12:30 PM	
12:30 PM	1:00 PM	6
1:00 PM	1:30 PM	36
1:30 PM	2:00 PM	36
2:00 PM	2:30 PM	6
2:30 PM	3:00 PM	
3:00 PM	3:30 PM	
3:30 PM	4:00 PM	
4:00 PM	4:30 PM	
4:30 PM	5:00 PM	
5:00 PM	5:30 PM	
5:30 PM	6:00 PM	
6:00 PM	6:30 PM	
6:30 PM	7:00 PM	
7:00 PM	7:30 PM	
7:30 PM	8:00 PM	6
8:00 PM	8:30 PM	1
8:30 PM	9:00 PM	
9:00 PM	9:30 PM	
9:30 PM	10:00 PM	
10:00 PM	10:30 PM	
10:30 PM	11:00 PM	
11:00 PM	11:30 PM	
11:30 PM	12:00 PM	
12:00 PM	12:30 AM	
12:30 AM	1:00 AM	
1:00 AM	1:30 AM	
1:30 AM	2:00 AM	
2:00 AM	2:30 AM	
2:30 AM	3:00 AM	
3:00 AM	3:30 AM	
3:30 AM	4:00 AM	
4:00 AM	4:30 AM	
4:30 AM	5:00 AM	

	HOLE #							TOTALS
	PREVIOUS FOOTAGE DRILLED	~~0~~	95'					
	FOOTAGE DRILLED THIS DATE		50					
	SAMPLES TAKEN THIS DATE		10					
PROTECTIVE CASING	FROM							
	TO							
CONDUCTOR CASING	FROM							
	TO							
CEMENT SEAL	FROM							
	TO							
BENT. SEAL	FROM							
	TO							
SAND PACK	FROM							
	TO							
BLANK CASING	FROM							
	TO							
SCREEN	FROM							
	TO							
WATER LEVEL			No water					
FORMATION DESCRIPTION	FROM							
	TO							
	FROM							
	TO							
	FROM							
	TO							

DRILLING SUPPLIES • CONSTRUCTION MATERIALS SAFETY EQUIPMENT • MISCELLANEOUS

QTY.	DESCRIPTION
	____"X____' Steel Well Protector
	____"X____' Steel Guard Posts
	Bags: Concrete Mix
	Flush Traffic Vault: Size _____
	Padlock: Keyed _____
18	Bags: Portland Type II Cement
	Bags: Grout-Volclay/Enviroplug
	Pails: Bentonite Pellets-Size _____
	Bags: Bentonite Chips-Size _____
	Bags: Bentonite Gel Powder
	Bags: Sand-Grade _____
	Bags: Sand-Grade _____
	Top Cap: Plug: Type _____
	Low-Carbon Steel Casing: Size _____
	____"X 5' Casing: PVC S.S.
	____"X 10' Casing: PVC S.S.
	____"X 5' Screen-Slot Size _____
	____"X 10' Screen-Slot Size _____
	Centralizers-Size _____
	____"X ____' Sump
	Bottom Caps
4	55 Gal. Drums-17H Rated
~~2~~ 3	~~2~~ 6" Sample Liners
	____"X ____' Split Spoon Bodies
	____" Blunt Spoon Shoes
	____" Steel Finger Baskets
	Visqueen Tarps 6 mil.
	Drill Bits-Size _____

EVENTS / CONDITIONS / CHANGES:

Drilled & Sampled From 95' to 145'
8" Hollow Stem, no water, Grouted hole From 145' to 105', prepare hole to Install well.

ALL APPLICABLE HOURS, FOOTAGE, SUPPLIES, ETC. SUPPLIED ARE TO BE CONSIDERED CHARGEABLE

DRILLER/OPER. REMARKS & APPROVAL: William Hogate

FIELD SUPER. REMARKS & APPROVAL: Chuck Headley

CLIENTS REMARKS:

CLIENTS APPROVAL:

OF CREW WITH CHARAGEABLE PER DIEM THIS DATE: 2

OF CREW UNDER LEVEL _____ PERSONAL PROTECTION THIS DATE:

FORM NO. LES 4-92

CLIENTS COPY

LAYNE ENVIRONMENTAL SERVICES, INC.

DRILLER'S DAILY DRILL REPORT

DRILLING /PROJECT INFORMATION

CLIENT: Ludlow & Salmagini Date 4-8 1994

DRILLING LOCATION: Vacaville Ca. JOB NO. 94-54

PERSONNEL EMPLOYED

EMPLOYEE'S NAMES	TOTAL HOURS
DRILLER/OPER. William Hoyt	9.5
HELPER Steve McCoy	9.5
LABORER	
GROUTER	
DEV. RIG OPER.	
LABORER	
PROJECT MAN.	
FIELD SUPER.	

EQUIPMENT EMPLOYED

DESCRIPTION	UNIT NO.
Drill Rig	413
Pipe Truck	301
Crew Truck	
Grout Plant	
Steam Cleaner	
Development Rig	
Generator	
Compressor	
Booster	
Mud Pump	
Water Truck	
Supply Truck Trailer	
Backhoe/Forklift	

ACCOUNTING FOR DAILY ACTIVITY BY ITEM

ITEM #	DESCRIPTION OF ITEM	HOURS
1.	Mob: ☑ Demob: ☑ _____ miles	1.0
2.	Daily travel to the field. _____ miles	
3.	Orientation Safety Mtg. Rig Up Dn.	
4.	Drilling (hammer) (_____ hrs. Rotary Conversion).	
5.	Drilling (rotary).	
6.	Drilling (auger).	6.0
7.	Drilling (coring).	
8.	Sampling (S.SPN., Shelby, etc.)	
9.	Pull out drill pipe.	
10.	Abandon hole	
11.	Water testing.	
12.	Clean out hole.	
13.	Well construction (below cradle).	
14.	Decontamination.	
15.	Site clean-up Spoils handling.	
16.	Move between holes.	
17.	Water hauling. _____ gallons	
18.	Suface completion.	
19.	Alignment test.	
20.	Development.	
21.	Work on stuck pipe.	
22.	Stand by with crew.	
23.	Standby without crew.	
24.	Lunch —	1.0
25.		
26.		
27.		
28.		
29.	Yard time	2.0
30.	Scheduled Maintenance & P.M. Service.	
31.	Unscheduled repairs.	
	TOTAL HOURS	10.5

FROM	TO	ITEM #
5:00 AM	5:30 AM	
5:30 AM	6:00 AM	
6:00 AM	6:30 AM	
6:30 AM	7:00 AM	
7:00 AM	7:30 AM	25
7:30 AM	8:00 AM	25
8:00 AM	8:30 AM	
8:30 AM	9:00 AM	6
9:00 AM	9:30 AM	
9:30 AM	10:00 AM	
10:00 AM	10:30 AM	
10:30 AM	11:00 AM	
11:00 AM	11:30 AM	
11:30 AM	12:00 N	6
12:00 N	12:30 PM	24
12:30 PM	1:00 PM	24
1:00 PM	1:30 PM	6
1:30 PM	2:00 PM	
2:00 PM	2:30 PM	
2:30 PM	3:00 PM	
3:00 PM	3:30 PM	
3:30 PM	4:00 PM	6
4:00 PM	4:30 PM	
4:30 PM	5:00 PM	25
5:00 PM	5:30 PM	25
5:30 PM	6:00 PM	
6:00 PM	6:30 PM	
6:30 PM	7:00 PM	
7:00 PM	7:30 PM	
7:30 PM	8:00 PM	
8:00 PM	8:30 PM	
8:30 PM	9:00 PM	
9:00 PM	9:30 PM	
9:30 PM	10:00 PM	
10:00 PM	10:30 PM	
10:30 PM	11:00 PM	
11:00 PM	11:30 PM	
11:30 PM	12:00 PM	
12:00 PM	12:30 AM	
12:30 AM	1:00 AM	
1:00 AM	1:30 AM	
1:30 AM	2:00 AM	
2:00 AM	2:30 AM	
2:30 AM	3:00 AM	
3:00 AM	3:30 AM	
3:30 AM	4:00 AM	
4:00 AM	4:30 AM	
4:30 AM	5:00 AM	

	TOTALS
HOLE #	
PREVIOUS FOOTAGE DRILLED	
FOOTAGE DRILLED THIS DATE	
SAMPLES TAKEN THIS DATE	
PROTECTIVE CASING FROM	
PROTECTIVE CASING TO	
CONDUCTOR CASING FROM	
CONDUCTOR CASING TO	
CEMENT SEAL FROM	
CEMENT SEAL TO	
BENT. SEAL FROM	
BENT. SEAL TO	
SAND PACK FROM	
SAND PACK TO	
BLANK CASING FROM	
BLANK CASING TO	
SCREEN FROM	
SCREEN TO	
WATER LEVEL	☒
FORMATION DESCRIPTION FROM	☒
FORMATION DESCRIPTION TO	☒
FORMATION DESCRIPTION FROM	☒
FORMATION DESCRIPTION TO	☒
FORMATION DESCRIPTION FROM	☒
FORMATION DESCRIPTION TO	☒

DRILLING SUPPLIES • CONSTRUCTION MATERIALS SAFETY EQUIPMENT • MISCELLANEOUS

QTY.	DESCRIPTION
	____"X____' Steel Well Protector
	____"X____' Steel Guard Posts
	Bags: Concrete Mix
	Flush Traffic Vault: Size _____
	Padlock: Keyed _____
	Bags: Portland Type II Cement
	Bags: Grout-Volclay/Enviroplug
	Pails: Bentonite Pellets-Size _____
	Bags: Bentonite Chips-Size _____
	Bags: Bentonite Gel Powder
	Bags: Sand-Grade _____
	Bags: Sand-Grade _____
	Top Cap Plug: Type _____
	Low-Carbon Steel Casing: Size _____
	____"X 5' Casing: PVC S.S. _____
	____"X 10' Casing: PVC S.S _____
	____"X 5' Screen-Slot Size _____
	____"X 10' Screen-Slot Size _____
	Centralizers-Size _____
	____"X ____' Susp.
40	Bottom Caps Plastic 2"
2	55 Gal. Drums-17H Rated
40	2" x 6" Sample Liners
	____"X ____' Split Spoon Bodies
	____" Slunt Spoon Shoes
	____" Steel Finger Baskets
	Visqueen Tarps 6 mil.
	Drill Bits-Size _____

EVENTS / CONDITIONS / CHANGES:

Drilled to 100' Encountered water @ 95'
Sampled every 5'

ALL APPLICABLE HOURS, FOOTAGE, SUPPLIES, ETC. SUPPLIED ARE TO BE CONSIDERED CHARGEABLE

DRILLER/OPER. REMARKS & APPROVAL William Hoyt

FIELD SUPER. REMARKS & APPROVAL Mark Bradley

CLIENTS REMARKS:

CLIENTS APPROVAL:

OF CREW WITH CHARAGEABLE PER DIEM THIS DATE 2

OF CREW UNDER LEVEL PERSONAL PROTECTION THIS DATE

FORM NO. LES 4.92

CLIENT'S COPY

LAYNE-WESTERN COMPANY

DRILLER'S DAILY DRILL REPORT

PERSONNEL EMPLOYED

EMPLOYEE'S NAMES	TOTAL HOURS
DRILLER/OPER. William Hoyte	12.5
HELPER Steve McCoy	12.5
LABORER	
GROUTER	
DEV. RIG OPER.	
LABORER	
PROJECT MAN.	
FIELD SUPER.	

EQUIPMENT EMPLOYED

DESCRIPTION	UNIT NO
Drill Rig.	413
Pipe Truck	301
Crew Truck	
Grout Plant	
Steam Cleaner	
Development Rig.	
Generator	
Compressor	
Booster	
Mud Pump	
Water Truck	
Supply Truck-Trailer	
Backhoe/Forklift	

ACCOUNTING FOR DAILY ACTIVITY BY ITEM

ITEM #	DESCRIPTION OF ITEM	HOURS
1.	Mob. 3 Demob. 3 _____ miles	1.5
2.	Daily travel to the field. _____ miles	
3.	Orientation Safety Mtg. Rig Up/ Dn.	
4.	Drilling (hammer) (_____ hrs. Rotary Conversion).	
5.	Drilling (rotary).	
6.	Drilling (auger).	10.0
7.	Drilling (coring).	
8.	Sampling (S.P.N., Shelby, etc.)	
9.	Pull out drill pipe.	
10.	Abandon hole.	
11.	Water testing.	
12.	Clean out hole.	
13.	Well construction (below grade).	
14.	Decontamination.	
15.	Site clean-up Spoils handling.	
16.	Move between holes	
17.	Water hauling. _____ gallons	
18.	Suface completion	
19.	Alignment test.	
20.	Development.	
21.	Work on stuck pipe.	
22.	Stand by with crew	
23.	Standby without crew	
24.	Lunch —	.5
25.		
26.		
27.		
28.		
29.	Yard time	1.
30.	Scheduled Maintenance & P.M. Service	
31.	Unscheduled repairs	
	TOTAL HOURS	13

EVENTS / CONDITIONS / CHANGES:

Installed Well, to 98.5
& Completed

CLIENTS COPY

FROM	TO	ITEM #
12:00 PM	12:30 AM	
12:30 AM	1:00 AM	
1:00 AM	1:30 AM	
1:30 AM	2:00 AM	
2:00 AM	2:30 AM	
2:30 AM	3:00 AM	
3:00 AM	3:30 AM	
3:30 AM	4:00 AM	
4:00 AM	4:30 AM	
4:30 AM	5:00 AM	
5:00 AM	5:30 AM	
5:30 AM	6:00 AM	
6:00 AM	6:30 AM	29
6:30 AM	7:00 AM	
7:00 AM	7:30 AM	29
7:30 AM	8:00 AM	1
8:00 AM	8:30 AM	6
8:30 AM	9:00 AM	
9:00 AM	9:30 AM	
9:30 AM	10:00 AM	
10:00 AM	10:30 AM	
10:30 AM	11:00 AM	
11:00 AM	11:30 AM	
11:30 AM	12:00 N	
12:00 N	12:30 PM	6
12:30 PM	1:00 PM	24
1:00 PM	1:30 PM	2
1:30 PM	2:00 PM	
2:00 PM	2:30 PM	
2:30 PM	3:00 PM	
3:00 PM	3:30 PM	
3:30 PM	4:00 PM	
4:00 PM	4:30 PM	
4:30 PM	5:00 PM	
5:00 PM	5:30 PM	
5:30 PM	6:00 PM	6
6:00 PM	6:30 PM	8 1.5
6:30 PM	7:00 PM	16
7:00 PM	7:30 PM	
7:30 PM	8:00 PM	
8:00 PM	8:30 PM	
8:30 PM	9:00 PM	
9:00 PM	9:30 PM	
9:30 PM	10:00 PM	
10:00 PM	10:30 PM	
10:30 PM	11:00 PM	
11:00 PM	11:30 PM	
11:30 PM	12:00 PM	

ALL APPLICABLE HOURS, FOOTAGE, SUPPLIES, ETC. SUPPLIED ARE TO BE CONSIDERED CHARGEABLE

DRILLER/OPER. REMARKS & APPROVAL William Hoyte

FIELD SUPER. REMARKS & APPROVAL Chuck Hastings

CLIENTS REMARKS:

CLIENTS APPROVAL:

DRILLING /PROJECT INFORMATION

CLIENT: Luhdorff & Scalmanini Date 4-12 1994

DRILLING LOCATION: Clarksville CA JOB NO. 5658

		TOTALS
HOLE #		
PREVIOUS FOOTAGE DRILLED		
FOOTAGE DRILLED THIS DATE		
SAMPLES TAKEN THIS DATE		
PROTECTIVE CASING	FROM 10x8 Protector	
	TO 3' Above ground	
CONDUCTOR CASING	FROM	
	TO	
CEMENT SEAL	FROM 66	
	TO 0	
BENT SEAL	FROM 68	
	TO 66	
SAND PACK	FROM 104	
	TO 68	
BLANK CASING	FROM 98.5	
	TO 0	
SCREEN	FROM 98.5	
	TO 78.5	
WATER LEVEL		
FORMATION DESCRIPTION	FROM	
	TO	
	FROM	
	TO	
	FROM	
	TO	

DRILLING SUPPLIES • CONSTRUCTION MATERIALS SAFETY EQUIPMENT • MISCELLANEOUS

QTY.	DESCRIPTION
	8 x 5 ' Steel Well Protector
	___ x ___ ' Steel Guard Posts
2	Bags: Concrete Mix
	Flush Traffic Vault: Size
1	Padlock: Keyed
12	Bags: Portland Type II Cement
	Bags: Grout-Volclay Enviroplug
1	Pails: Bentonite Pellets-Size 3/4
	Bags: Bentonite Chips-Size
1	Bags: Bentonite Gel Powder
15	Bags: Sand-Grade #3
	Bags: Sand-Grade
1	Top Cap Plug: Type Locking
	Low-Carbon Steel Casing: Size
	___ x 5' Casing: PVC S.S.
9	33 x 10' Casing: PVC S.S.
	___ x 5' Screen-Slot Size
2	2 x 10' Screen-Slot Size .020
	Centralizers-Size
	___ x ___ ' Sump
1	Bottom Caps Threaded
2	55 Gal. Drums-17H Rated
	___ / ___ Sample Liners
	___ x ___ ' Split Spoon Bodies
	___ " Blunt Spoon Shoes
	___ " Steel Finger Baskets
	Visqueen Tarps 6 mil.
	Drill Bits-Size

OF CREW WITH CHARAGEABLE PER DIEM THIS DATE 2

OF CREW UNDER LEVEL PERSONAL PROTECTION THIS DATE

LAYNE-WESTERN COMPANY

DRILLER'S DAILY DRILL REPORT

ACCOUNTING FOR DAILY ACTIVITY BY ITEM

ITEM #	DESCRIPTION OF ITEM	HOURS
1.	Mob: ☒ Demob: ☒ _____ miles	1.5
2.	Daily travel to the field. _____ miles	
3.	Orientation Safety Mtg. Rig Up Dn.	
4.	Drilling (hammer) (_____ hrs. Rotary Conversion).	
5.	Drilling (rotary).	
6.	Drilling (auger).	10.0
7.	Drilling (coring).	
8.	Sampling (SS,SPN., Shelby, etc.)	
9.	Pull out drill pipe.	
10.	Abandon hole.	
11.	Water testing.	
12.	Clean out hole.	
13.	Well construction (below grade).	
14.	Decontamination.	
15.	Site clean-up Spoils handling.	
16.	Move between holes.	
17.	Water hauling. _____ gallons	
18.	Surface completion.	
19.	Alignment test.	
20.	Development.	
21.	Work on stuck pipe.	
22.	Stand by with crew.	
23.	Standby without crew.	
24.	Lunch	.5
25.		
26.		
27.		
28.		
29.	Yard time.	1.
30.	Scheduled Maintenance & P.M. Service.	
31.	Unscheduled repairs.	
	TOTAL HOURS	13

PERSONNEL EMPLOYED

	EMPLOYEE'S NAMES	TOTAL HOURS
DRILLER/OPER.	William Hoyt	12.5
HELPER	Steve McCoy	12.5
LABORER		
GROUTER		
DEV. RIG OPER.		
LABORER		
PROJECT MAN.		
FIELD SUPER		

EQUIPMENT EMPLOYED

DESCRIPTION	UNIT NO.
Drill Rig	413
Pipe Truck	301
Crew Truck	
Grout Plant	
Steam Cleaner	
Development Rig	
Generator	
Compressor	
Booster	
Mud Pump	
Water Truck	
Supply Truck Trailer	
Backhoe/Forklift	

EVENTS CONDITIONS CHANGES.

Installed Well, to 98.5 & Completed

FROM	TO	ITEM #
12:00 PM	12:30 AM	
12:30 AM	1:00 AM	
1:00 AM	1:30 AM	
1:30 AM	2:00 AM	
2:00 AM	2:30 AM	
2:30 AM	3:00 AM	
3:00 AM	3:30 AM	
3:30 AM	4:00 AM	
4:00 AM	4:30 AM	
4:30 AM	5:00 AM	
5:00 AM	5:30 AM	
5:30 AM	6:00 AM	
6:00 AM	6:30 AM	29
6:30 AM	7:00 AM	
7:00 AM	7:30 AM	29
7:30 AM	8:00 AM	1
8:00 AM	8:30 AM	6
8:30 AM	9:00 AM	
9:00 AM	9:30 AM	
9:30 AM	10:00 AM	
10:00 AM	10:30 AM	
10:30 AM	11:00 AM	
11:00 AM	11:30 AM	
11:30 AM	12:00 N	
12:00 N	12:30 PM	6
12:30 PM	1:00 PM	24
1:00 PM	1:30 PM	6
1:30 PM	2:00 PM	
2:00 PM	2:30 PM	
2:30 PM	3:00 PM	
3:00 PM	3:30 PM	
3:30 PM	4:00 PM	
4:00 PM	4:30 PM	
4:30 PM	5:00 PM	
5:00 PM	5:30 PM	
5:30 PM	6:00 PM	6
6:00 PM	6:30 PM	6 1/2
6:30 PM	[illegible] PM	
7:00 PM	7:30 PM	16
7:30 PM	8:00 PM	
8:00 PM	8:30 PM	
8:30 PM	9:00 PM	
9:00 PM	9:30 PM	
9:30 PM	10:00 PM	
10:00 PM	10:30 PM	
10:30 PM	11:00 PM	
11:00 PM	11:30 PM	
11:30 PM	12:00 PM	

ALL APPLICABLE HOURS, FOOTAGE, SUPPLIES ETC. SUPPLIED ARE TO BE CONSIDERED CHARGEABLE

DRILLER/OPER. REMARKS & APPROVAL: William Hoyt

FIELD SUPER. REMARKS & APPROVAL: [illegible]

CLIENTS REMARKS:

CLIENTS APPROVAL:

CLIENT'S COPY

DRILLING /PROJECT INFORMATION

CLIENT: Luhdorff & Scalmanini — Date 4-12-1994

DRILLING LOCATION: Vacaville Ca — JOB NO 5658

HOLE #							TOTALS
PREVIOUS FOOTAGE DRILLED							
FOOTAGE DRILLED THIS DATE							
SAMPLES TAKEN THIS DATE							
PROTECTIVE CASING	FROM	Well Protector					
	TO	3'	above ground				
CONDUCTOR CASING	FROM						
	TO						
CEMENT SEAL	FROM	66					
	TO	0					
BENT. SEAL	FROM	68					
	TO	66					
SAND PACK	FROM	104					
	TO	68					
BLANK CASING	FROM	98.5					
	TO	0					
SCREEN	FROM	98.5					
	TO	78.5					
WATER LEVEL							☒
FORMATION DESCRIPTION	FROM						☒
	TO						
	FROM						☒
	TO						
	FROM						☒
	TO						

DRILLING SUPPLIES • CONSTRUCTION MATERIALS SAFETY EQUIPMENT • MISCELLANEOUS

QTY.	DESCRIPTION
	8 "X 5' Steel Well Protector
	"X ' Steel Guard Posts
2	Bags: Concrete Mix
	Flush Traffic Vault: Size
1	Padlock: Keyed
12	Bags: Portland Type II Cement
	Bags: Grout-Voidlav Enviroplug
1	Pails: Bentonite Pellets-Size 3/4
	Bags: Bentonite Chips-Size
1	Bags: Bentonite Gel Powder
15	Bags: Sand-Grade #3
	Bags: Sand-Grade
1	Top Cap Plug: Type Locklt
	Low-Carbon Steel Casing: Size
	"X 5' Casing: PVC S.S.
9	33 "X 10' Casing: PVC S.S.
	"X 5' Screen-Slot Size
2	2 "X 10' Screen-Slot Size .020
	Centralizers-Size
	"X ' Sump
1	Bottom Caps Threaded
2	55 Gal. Drums-17H Rated
	" Sample Liners
	"x ' Split Spoon Bodies
	" Blunt Spoon Shoes
	" Steel Finger Baskets
	Visqueen Tarps 6 mil.
	Drill Bits-Size

# OF CREW WITH CHARAGEABLE PER DIEM THIS DATE	2
# OF CREW UNDER LEVEL PERSONAL PROTECTION THIS DATE	

LAYNE-WESTERN COMPANY

DRILLER'S DAILY DRILL REPORT

DRILLING / PROJECT INFORMATION

CLIENT: Luhdorff & Scalmanini — Date 4-13-99

DRILLING LOCATION: Ukiah, CA — JOB NO. 5658

PERSONNEL EMPLOYED

EMPLOYEE'S NAMES	TOTAL HOURS
DRILLER/OPER. William Hoyt	11 —
HELPER Steve Mccoy	11 —
LABORER	
GROUTER	
DEV. RIG OPER	
LABORER	
PROJECT MAN	
FIELD SUPER	

EQUIPMENT EMPLOYED

DESCRIPTION	UNIT NO.
Drill Rig	413
Pipe Truck	901
Crew Truck	
Grout Plant	
Steam Cleaner	
Development Rig	
Generator	
Compressor	
Booster	
Mud Pump	
Water Truck	
Supply Truck Trailer	
Backhoe/Forklift	

ACCOUNTING FOR DAILY ACTIVITY BY ITEM

ITEM #	DESCRIPTION OF ITEM	HOURS
1.	Mob: ☑ Demob: ☐ _____ miles	2
2.	Daily travel to the field. _____ miles	
3.	Orientation Safety Mtg. Rig Up Dn.	
4.	Drilling (hammer) (_____ hrs. Rotary Conversion).	
5.	Drilling (rotary).	
6.	Drilling (auger).	8
7.	Drilling (coring).	
8.	Sampling (S.P.N., Shelby, etc.)	
9.	Pull out drill pipe	
10.	Abandon hole	
11.	Water testing	
12.	Clear out hole	
13.	Well construction (below grade)	
14.	Decontamination	
15.	Site clean-up Spoils handling	
16.	Move between holes.	
17.	Water hauling. _____ gallons	
18.	Surface completion	
19.	Alignment test.	
20.	Development	
21.	Work on stuck pipe	
22.	Stand by with crew	
23.	Standby without crew	
24.	Lunch —	1
25.		
26.		
27.		
28.		
29.	Yard time	1
30.	Scheduled Maintenance & P.M. Service	
31.	Unscheduled repairs	
	TOTAL HOURS	12

FROM	TO	ITEM #
12:00 PM	12:30 AM	
12:30 AM	1:00 AM	
1:00 AM	1:30 AM	
1:30 AM	2:00 AM	
2:00 AM	2:30 AM	
2:30 AM	3:00 AM	
3:00 AM	3:30 AM	
3:30 AM	4:00 AM	
4:00 AM	4:30 AM	
4:30 AM	5:00 AM	
5:00 AM	5:30 AM	
5:30 AM	6:00 AM	
6:00 AM	6:30 AM	29
6:30 AM	7:00 AM	29
7:00 AM	7:30 AM	29 1/2
7:30 AM	8:00 AM	1/2
8:00 AM	8:30 AM	6
8:30 AM	9:00 AM	
9:00 AM	9:30 AM	
9:30 AM	10:00 AM	
10:00 AM	10:30 AM	
10:30 AM	11:00 AM	
11:00 AM	11:30 AM	
11:30 AM	12:00 N	6
12:00 N	12:30 PM	24 1/2
12:30 PM	1:00 PM	30 1/2
1:00 PM	1:30 PM	6
1:30 PM	2:00 PM	
2:00 PM	2:30 PM	
2:30 PM	3:00 PM	
3:00 PM	3:30 PM	
3:30 PM	4:00 PM	
4:00 PM	4:30 PM	
4:30 PM	5:00 PM	6
5:00 PM	5:30 PM	5 1/2
5:30 PM	6:00 PM	1/2
6:00 PM	6:30 PM	
6:30 PM	7:00 PM	
7:00 PM	7:30 PM	
7:30 PM	8:00 PM	
8:00 PM	8:30 PM	
8:30 PM	9:00 PM	
9:00 PM	9:30 PM	
9:30 PM	10:00 PM	
10:00 PM	10:30 PM	
10:30 PM	11:00 PM	
11:00 PM	11:30 PM	
11:30 PM	12:00 PM	

HOLE #	2					TOTALS
PREVIOUS FOOTAGE DRILLED						
FOOTAGE DRILLED THIS DATE						
SAMPLES TAKEN THIS DATE	9 "No Liners"					
PROTECTIVE CASING FROM	(Wilson only)					
PROTECTIVE CASING TO						
CONDUCTOR CASING FROM						
CONDUCTOR CASING TO						
CEMENT SEAL FROM	155					
CEMENT SEAL TO	140					
BENT. SEAL FROM						
BENT. SEAL TO						
SAND PACK FROM						
SAND PACK TO						
BLANK CASING FROM						
BLANK CASING TO						
SCREEN FROM						
SCREEN TO						
WATER LEVEL						☒
FORMATION DESCRIPTION FROM						☒
FORMATION DESCRIPTION TO						
FORMATION DESCRIPTION FROM						☒
FORMATION DESCRIPTION TO						
FORMATION DESCRIPTION FROM						☒
FORMATION DESCRIPTION TO						

DRILLING SUPPLIES • CONSTRUCTION MATERIALS • SAFETY EQUIPMENT • MISCELLANEOUS

QTY.	DESCRIPTION
	____"X____' Steel Well Protector
	____"X____' Steel Guard Posts
	Bags: Concrete Mix
	Flush Traffic Vault: Size _____
	Padlock: Keyed _____
5	Bags: Portland Type II Cement
	Bags: Grout-Volclay Enviroplug
	Pails: Bentonite Pellets-Size _____
	Bags: Bentonite Chips-Size _____
1	Bags: Bentonite Gel Powder
	Bags: Sand-Grade _____
	Bags: Sand-Grade _____
	Top Cap Plug: Type _____
	Low-Carbon Steel Casing: Size _____
	____"X 5' Casing: PVC S.S.
	____"X 10' Casing: PVC S.S.
	____"X 5' Screen-Slot Size _____
	____"X 10' Screen-Slot Size _____
	Centralizers-Size _____
	____"X ____' Sump
	Bottom Caps
4	55 Gal. Drums-17H Rated
	____" ____ Sample Liners
	____"X ____' Split Spoon Bodies
	____" Blunt Spoon Shoes
	____" Steel Finger Baskets
	Visqueen Tarps 6 mil.
	Drill Bits-Size _____

EVENTS / CONDITIONS / CHANGES

Set up on hole #2 Reamed to 115, Sampled to 155, Grouted 155 to 140'

ALL APPLICABLE HOURS, FOOTAGE, SUPPLIES, ETC. SUPPLIED ARE TO BE CONSIDERED CHARGEABLE

DRILLER/OPER. REMARKS & APPROVAL: William Hoyt

FIELD SUPER. REMARKS & APPROVAL: Chuck Headley

CLIENTS REMARKS:

CLIENTS APPROVAL:

OF CREW WITH CHARAGEABLE PER DIEM THIS DATE: 2

OF CREW UNDER LEVEL ____ PERSONAL PROTECTION THIS DATE:

CLIENTS COPY

403i

Construction Quality Assurance Plan

for the Inactive Brown Street Landfill

Centennial Park

Vacaville, California

September 1999

40-343101.fh8

KLEINFELDER

CONSTRUCTION QUALITY ASSURANCE PLAN
INACTIVE BROWN STREET LANDFILL CLOSURE PROJECT
SOLANO COUNTY
CITY OF VACAVILLE, CALIFORNIA

September 3, 1999

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A Report Prepared for:

City of Vacaville
650 Merchant Street
Vacaville, California 95688

Construction Quality Assurance Plan
Inactive Brown Street Landfill Closure Project
Solano County
City of Vacaville

Kleinfelder Job No. 40-3431-01-001

Prepared by:

Timothy A. Crandall, P.E.
Senior Engineer

KLEINFELDER, INC.
780 Chadbourne Road, Suite D
Fairfield, California 94585

(707) 429-4070

September 3, 1999

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Typical Construction Inspection Forms:

Daily Field Report (2 Versions)

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1. INTRODUCTION

This Construction Quality Assurance (CQA) Plan has been prepared by Kleinfelder, Inc. for the City of Vacaville for use during closure construction of the Inactive Brown Street Landfill.

The CQA Plan has been developed in accordance with Section 20324 of Title 27, California Code of Regulations and following the recommendations of the U.S. EPA Technical Guidance Documents: Construction Quality Assurance for Hazardous Waste Land Disposal Facilities and Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems. This CQA plan is based on the design contained in the contract plans and specifications titled "BROWN STREET LANDFILL CLOSURE" (City of Vacaville, July 7, 1999).

The CQA Plan sets forth responsibilities and procedures to evaluate fulfillment of applicable requirements of Special Provisions and Construction Plans for construction. The CQA Plan also sets forth protocols and procedures for the CQA inspection, acceptance and repair of the various engineering components of construction. The CQA Plan addresses the rough grading of the existing landfill, construction of the landfill cover, installation of a new groundwater monitoring well, installation of additional gas probes, and erosion control and landscape construction activities.

The CQA plan is divided into the following sections:

- Definitions.
- Personnel Qualifications.
- Project Meetings.
- Inspection Activities.
- Documentation.

These above mentioned topics are discussed in greater detail in the following sections.

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2. DEFINITIONS

This section provides definitions of terms used in this Construction Quality Assurance (CQA) Plan listed in alphabetical order.

Closure Fill Configuration

The closure fill for the Inactive Brown Street Landfill consists of the components, listed from bottom to top, as follows:

- Rough Grading of Landfill Surface - The existing landfill surface will be re-graded to the lines and grades shown on the Project Plans. The existing soils will be placed at lifts no greater than 8 inches, at a minimum in-place Maximum Dry Density of 90 %, at 1 to 3% above optimum moisture content in accordance with ASTM D-1557.
- Final Cover- Final cover soils will consist of fine- grained soils from the designated borrow area located North of the landfill. Excavated soils will be approved as final cover soils prior to placement. Approved excavated soils shall be transported and placed on the rough graded landfill surface. Soils will be placed at lifts no greater than 8 inches, at a minimum in-place Maximum Dry Density of 90 %, at 1 to 3% above optimum moisture content in accordance with ASTM D-1557. Final cover layer will have a minimum compacted thickness of 24 inches.
- Groundwater Monitoring Wells - These wells are designated as B-1 through B-3 on the Project Plans and are used for water level measurement and water quality analysis. The existing wells will be lowered to finish grade. A fourth well B-2b will be installed per work plan approved by the Regional Water Quality Control Board.
- Landfill Gas Monitoring Wells – These wells are designated as GP-1 thru GP-6 on the Project Plans and are used for monitoring gases within the landfill environment. Well GP-3 will require an extension and the remaining wells will lowered to achieve the required finish final cover elevations. Four new gas monitoring wells will be installed per the work plan approved by Solano County Department of Environmental Management.
- Landscaping for Erosion Control – To protect the integrity of the final landfill cover, the borrow area and the landfill cover will be hydroseeded with native drought resistant grasses and wildflowers. A limited drip irrigation system will be installed at the overlook area (Northeast corner of the landfill) for vegetation establishment and long term plant and shrub growth.

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Construction Quality Assurance Monitor-*Frank Martinez, City of Vacaville*

The Construction Quality Assurance (CQA) Monitor works under the supervision and guidance of the CQA Officer.

The CQA Monitor will perform on site inspections of construction, and evaluate whether the work meets design plans and specifications.

The CQA Monitor will perform and observations during construction activities such as:

- Documenting proper calibration of all testing equipment.
- Becoming familiar with the Contractor's work schedule and phase of work.
- Preparing inspection and test data sheets, photographic data sheets, daily reports.

Construction Quality Assurance Monitor- *Art Gomez, Kleinfelder Inc.*

The Construction Quality Assurance (CQA) Monitor works under the supervision and guidance of the CQA Officer.

- Documenting proper calibration of all testing equipment.
- Recording all field and laboratory test data in an organized manner.
- Reporting observations and test results to the CQA Officer as the work progresses.

Construction Quality Assurance Officer- *Tim Crandall P.E., Kleinfelder Inc.*

The Construction Quality Assurance (CQA) Officer will be a party independent from The City of Vacaville and the Contractor who is responsible for observing and documenting activities related to the quality assurance of the construction.

The CQA Officer is responsible for issuing a construction report, and is a register civil engineer or a certified engineering geologist registered in the State of California.

The CQA Officer is also responsible for overseeing the laboratory and field testing and inspection of earthfill and cover materials and monitoring results to provide review of the Construction Quality Assurance Monitor's recommendations.

Other major duties and responsibilities of the CQA Officer are:

- Review design plans and specifications for accuracy, consistency and completeness.

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- Familiarize and educate the CQA Monitor in CQA requirements and procedures pertaining to construction.
- Prepare a schedule of CQA inspection activities to realize the CQA testing strategies and coordinate CQA Monitors necessary for conducting inspections.
- Review and interpret all data and reports prepared by CQA Monitor.
- Identify work that would be accepted or rejected based on observations or test results.
- Report such work elements to the City of Vacaville.

The CQA Officer may require special testing, inspection, or approval in areas of questionable quality or deviations from design specifications.

- Prepare a final construction report documenting construction activities and test results.
- Certify that the final project is built per the specifications and construction plans as documented in the construction report.

Contractor- ***Yubacon Inc.***
Party or parties entering into a contract with the City of Vacaville for performance of the specified work and responsible for all activities associated with the construction.

Design Engineer- ***Tawnia Skow, City of Vacaville***
City of Vacaville

Material Testing Laboratory
Kleinfelder Inc., a party independent from the City of Vacaville and the Contractor who is responsible for conducting material tests on samples of soil used in the cap.

Owner
City of Vacaville

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Quality Assurance

All planned and systematic actions initiated by the owner of the facility which are necessary to ensure that the construction of the entire facility, including manufacture, fabrication, and installation of the various components of the facility meet design specifications and performance requirements.

Quality Control

Those actions initiated by the manufacturer(s) and installer(s) which provide a means of controlling and measuring the characteristics of the defined work as they relate to fulfillment of applicable established requirements.

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3. PERSONNEL QUALIFICATIONS

The CQA team will consist of the following:

3.1 CQA OFFICER

The CQA Officer will:

- Have formal academic training in civil engineering, geology or another landfill closure related discipline.
- Have related experience in earthwork construction, landfill design, installation of geosynthetic materials and materials testing.
- Be a registered civil engineer or certified engineering geologist in the State of California.
- Have practical, technical, and managerial experience to ensure that the CQA Plan is properly implemented.
- Be able to educate CQA personnel about CQA requirements and procedures pertaining to construction of the closure cover.
- Be able to communicate effectively with various project personnel including City of Vacaville personnel, Design Engineers, and Contractors to ensure that there will be a clear understanding of construction activities and the CQA Plan.
- Identify and recommend work to be accepted or rejected based on observations and/or test results.

3.2 CQA MONITOR

The CQA Monitor will:

- Have formal training and practical experience in inspecting and testing construction work relative to earthwork construction, installation of synthetic materials, including

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conducting and recording inspection activities, preparing daily reports, and performing field testing.

- Possess knowledge required for specific field practices and construction techniques for landfill cover construction and all codes and regulations involving material handling, observation of testing procedures. equipment and reporting procedures.

- Evaluate and document the Contractor's construction work relative to project plans and specifications.

3.3 CONTRACTOR

The Contractor shall:

- Have practical and professional experience in earthwork construction.

- Demonstrate the successful completion of a minimum of two similar projects within the past five years.

The Contractor's site supervisor shall:

- Have formal training and practical experience in construction management for earthwork construction projects.

- Have specific knowledge of construction procedures, equipment capabilities, and dust and erosion control.

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4. PROJECT MEETINGS

Periodic meetings will be held throughout the duration of the construction project to facilitate communication between the City of Vacaville, the CQA Officer, CQA Monitor, Design Engineer, and the Contractor. These meetings are essential tools in aiding the organizations involved in construction activities in becoming familiar with facility designs, construction procedures, and recent design changes, if any. Meetings to be conducted during closure activities are:

- Pre-construction meetings.
- Daily progress meetings.
- Weekly progress meetings.
- Problem or work deficiency meetings (as needed).

4.1 PRE-CONSTRUCTION MEETING

A pre-construction meeting will be held prior to the start of any construction activity. The parties attending this meeting include the City of Vacaville, Design Engineer, CQA Officer, CQA Monitor, and the Contractor. The purpose of this meeting is to identify and resolve any uncertainties regarding the design specification requirements, the CQA Plan, and construction procedures. The meeting will cover the following:

- Each organization will be supplied with all relevant CQA documents and supporting information.
- The CQA Plan will be explained with respect to design criteria, construction plans, and specifications.
- Any changes to the CQA Plan needed to meet or exceed the specified design will be identified.
- The responsibilities of each organization will be reviewed and proper lines of communication will be identified and names, telephone numbers, and alternative contact information will be exchanged.

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- Protocol for field observations and field tests will be discussed.
- Protocol for all organizations will be reviewed for handling construction deficiencies, repair work, and retesting.
- Protocol for document reporting, handling, distribution, and storage during and following construction activities will be reviewed.
- Work area and safety protocols will be discussed.
- Procedures to protect construction materials from adverse effects of weather during storage will be reviewed.
- The project schedule for all operations will be reviewed.
- A site inspection will be conducted to discuss work areas, work plans, stockpiling and laydown areas and other site or construction issues.

The pre-construction meetings will be documented by the CQA Officer or Monitor and minutes will be transmitted to all parties.

4.2 DAILY PROGRESS MEETINGS

A progress meeting shall be held daily at the work area just prior to the start or following completion of work. At a minimum, the meeting should include the CQA Monitor and the Contractor. The purpose of the meeting is to:

- Review the previous day's activities and accomplishments.
- Review the work location and activities for the coming day.
- Identify the Contractor's personnel and equipment assignments for the day.
- Discuss any problems or deficiencies.
- Adopt plans to resolve the problems or deficiencies.

4.3 WEEKLY PROGRESS MEETINGS

A progress meeting will be held at the beginning or end of each week to review the previous week's activities or progress, to discuss present and future work, and to discuss any current or

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potential construction problems. The City of Vacaville, the CQA Officer and Monitor, and the Contractor shall attend. All weekly progress meetings will be documented by the CQA Officer or Monitor and the meeting minutes will be transmitted to interested parties.

4.4 PROBLEM OR WORK DEFICIENCY MEETINGS

When a problem or deficiency is occurring or is likely to occur, special meetings will be held. The City of Vacaville, the CQA Officer and Monitor, and the Contractor shall attend these meetings. The purpose of these meetings is to identify a problem or deficiency in the construction work, review alternative solutions, and select and implement a plan to resolve the problem or deficiency. The CQA Officer or Monitor will document the meetings and transmit minutes to all parties.

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5. INSPECTION ACTIVITIES

5.1 EARTHFILL

Earthfill inspection activities will be performed by the CQA Monitor during rough grading of the landfill and construction of the final cover layer. These activities are divided into pre-construction, construction, and post-construction activities.

The CQA Officer will conduct pre-construction training and information sessions with the CQA Monitor to familiarize him/her with the specified design, inspection policies, and procedures.

5.1.1 Pre-Construction

Pre-construction activities must be performed to provide an understanding of the work activities, design and construction requirements, material properties, and construction methods necessary to meet the design requirements prior to full scale earthfill construction. To accomplish this, a pre-construction meeting(s) will be held between the City of Vacaville, CQA Monitor, and the Contractor. See section (4.1). Cover layer earthfill materials will be tested for performance properties. Construction procedures will be established with the goal of meeting or exceeding the design requirements.

Pre-construction activities of the CQA Officer and Monitor are:

- Reviewing and becoming familiar with all aspects of the design criteria, construction plans, and specifications associated with earthfill construction.
- Identifying inconsistencies (if any) in the Plans and Specifications and bringing them to the Design Engineer's attention.
- Reviewing the Contractor's work schedule.
- Inspecting the import soil and borrow site stockpile material for uniformity and the presence of unsuitable materials.
- Reviewing prior laboratory testing reports for the earthfill materials (if available).

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- Reviewing the Contractor's and Installer's certifications and testimonies of relevant experience.

5.1.2 Construction

The CQA Officer and Monitor will implement a CQA program to verify compliance with the requirements of the specifications and constructions plans for earthfill construction. This program includes:

- Material conformance testing.
- Construction observation.

Activities associated with this program have been separated into the following categories:

- Borrow/Import operations.
- Conformance testing.
- Earthfill construction.
- Repairs.

5.1.2.1 Borrow/Import Operations

The CQA Monitor shall inspect the selected material produced during the borrow and import for gradation and presence of organic material, tree branches, debris, or other deleterious material.

5.1.2.2 Conformance Testing

The CQA Monitor will obtain one sample per 5000 cubic yards of borrow material for the final cover layer. Sample size will be representative for the specific test method as required by the Materials Testing Laboratory. More frequent testing may be necessary dependent upon the number of different soil types encountered.

The sample will be forwarded to the Materials Testing Laboratory where particle size analysis (ASTM D-422), soil classification (ASTM D-2487), and moisture density relationship (ASTM D-1557) tests will be performed.

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The CQA Monitor will review the test results to verify compliance with specified requirements. The CQA Monitor will report any nonconformance to the CQA Officer, the Contractor and the City of Vacaville.

Relative density testing and moisture-density testing results will be recorded for use in determining densities of placed fill. The locations and date of all sampling will be recorded in the CQA Monitor's daily summary report.

5.1.2.3 Landfill and Final Cover Construction

During construction of the Final Cover, the CQA Monitor shall:

- Observe all phases of construction and document the Contractor's compliance or noncompliance with the approved construction procedures, plans and specifications.
- Verify the relative density of the fill. The relative density (and moisture control) shall be measured at a rate of one in-place density test in accordance with ASTM D-2922 per 1000 cubic yards of fill. A minimum of one sand cone (ASTM D-1556) density test shall be performed for each 10 tests by method ASTM D-2922, or one sand cone test each day, whichever is greater. The density shall not be less than 90 percent of the maximum density determined by ASTM D-1557 for all tests.
- Perform periodic inspection of the relative density of each lift of the compacted final cover layer. The CQA Monitor will be required to pass or fail the compacted lift based on compliance with approved construction procedures and visual observation of the lift. If the CQA Monitor determines that the earthfill compaction is not acceptable, the Contractor will be required to rework the area(s) in question. Typical construction inspection forms are presented in the Appendix.

5.1.2.4 Repairs

Any areas of the final cover layer which have not been accepted by the CQA Monitor shall be repaired in accordance with the specifications to the acceptance of the CQA Monitor. The CQA

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Monitor shall document the repair by giving a detailed description of the location and details of the repairs. Repair procedures include:

- Excavation and recompaction of the area.
- Proof rolling or overcompacting.

All repairs shall be observed by the CQA Monitor, retested, and accepted prior to the post-construction inspection of the earthfill.

5.1.3 Post-construction

Upon completion of the construction, a post-construction inspection shall be conducted by the CQA Officer and CQA Monitor. The purpose of this inspection will be to identify those areas that require corrective attention by the Contractor. The inspection may be performed in stages, as the construction is completed on certain areas. The CQA Monitor will inspect the completed construction for the following:

- Low spots or depressions that would cause water to pond on the landfill. Areas that are damaged or improperly compacted.
- Areas that exhibit excessive erosion due to rainfall or other means during the construction period or as a result of construction activities.
- Large irregularities or protrusions in the finished grade resulting from rocks, sticks, grade stakes, cracks or the placement of excess material.
- Reviewing the construction record survey for conformance with design grades and slopes.

5.2 New Groundwater Monitoring Well (G.M.W.)

The groundwater monitoring wells inspection activities will be performed by the CQA Officer and CQA Monitor during installation and surface completion. These activities are divided into pre-construction, construction, and post-construction activities.

The CQA Officer will conduct pre-construction training and information sessions with the CQA Monitor to familiarize him/her with the specified design, inspection policies, and procedures.

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5.2.1 Pre-construction

Pre-construction activities for the installation will be performed to provide an understanding of the work activities, design and construction requirements, material properties, and installation methods that will meet the design requirements prior to full production of the monitoring well system. To accomplish this, a pre-construction meeting(s) will be held between the City of Vacaville, the Design Engineer, the CQA Officer and CQA Monitor, and the Contractor (see Section 4.1). Monitoring well quality control submittals will be reviewed for conformance to the specifications. Construction details will be discussed and methods finalized.

Pre-construction activities of the CQA Officer and CQA Monitor include:

- Review of all design criteria, construction plans, and specifications associated with installation of the groundwater monitoring well (G.M.W.).
- Review of Contractor's work schedule.
- Becoming familiar with the site and materials which are to be used in installation and /or surface completion of the monitoring well.
- Review and approval of the installation methods and equipment to be used for placement/completion of the monitoring well.
- Review and approval of Contractor's quality control submittals for conformance to the specifications requirements.

5.2.2 Construction

The CQA Officer and CQA Monitor will implement a CQA program to verify compliance with the requirements of the specifications and construction plans for the installation and/or surface completion of the monitoring well. This program includes:

- Material conformance testing, and
- Construction observation.

Activities associated with this program have been broken down into the following categories:

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- Delivery and storage;
- Monitoring well installation;
- Repairs.

5.2.2.1 Delivery and Storage

The CQA Monitor will verify the following:

- Equipment used to install/complete the well will not damage them.
- Care is used to install/complete the well.
- All documentation required by the specification has been received.
- Receipt of the materials had been documented.

At the CQA Monitor's discretion damaged wells may be rejected. Such wells or well shall be removed from the site as designated by City of Vacaville.

5.2.2.2 Groundwater Monitoring Well Installation

Prior to monitoring well installation/surface completion, the CQA Monitor shall verify that

- Well placed in correct location.
- Proper materials and equipment onsite.

The CQA Monitor shall inform the CQA Officer and the Contractor/Installer if any of the above conditions are not met.

Typical construction inspection forms are presented in the Appendix.

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5.2.3 Post-Construction

Upon completion of the monitoring well installation, a post-construction inspection will be conducted of the completed wells by the CQA Officer and CQA Monitor to identify those areas that require corrective attention. The CQA Monitor will inspect the wells liner for the following:

- Condition of casing.
- Total depth.
- Presence of soil or grout in well.
- Surface completion (overall condition).

If any of the above conditions are observed, the CQA Monitor will instruct the Contractor to repair the area in question to the CQA Officer's approval.

5.3 Landfill Gas Monitoring Wells

The landfill gas monitoring wells (LFGW) inspection activities will be performed by the CQA Officer and CQA Monitor during installation and surface completion. These activities are divided into pre-construction, construction, and post-construction activities.

The CQA Officer will conduct pre-construction training and information sessions with the CQA Monitor to familiarize him/her with the specified design, inspection policies, and procedures.

5.3.1 Pre-construction

Pre-construction activities for the installation will be performed to provide an understanding of the work activities, design and construction requirements, material properties, and installation methods that will meet the design requirements prior to full production of the monitoring well system. To accomplish this, a pre-construction meeting(s) will be held between the City of Vacaville, the Design Engineer, the CQA Officer and CQA Monitor, and the Contractor (see Section 4.1). Monitoring well quality control submittals will be reviewed for conformance to the specifications. Construction details will be discussed and methods finalized.

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Pre-construction activities of the CQA Officer and CQA Monitor include:

- Review of all design criteria, construction plans, and specifications associated with installation and/or surface completion of the LFGWs.
- Review of Contractor's work schedule.
- Becoming familiar with the site and materials which are to be used in installation and/or surface completion of the LFGWs.
- Review and approval of the installation methods and equipment to be used for placement/completion of the LFGWs.
- Review and approval of Contractor's quality control submittals for conformance to the specification requirements.

5.3.2 Construction

The CQA Officer and CQA Monitor will implement a CQA program to verify compliance with the requirements of the specifications and construction plans for the installation and/or surface completion of the LFGWs. This program includes:

- Material conformance testing, and
- Construction observation.

Activities associated with this program have been broken down into the following categories:

- Delivery and storage;
- LFGW installation;
- Repairs.

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5.3.2.1 Delivery and Storage

The CQA Monitor will verify the following:

- Equipment used to install/complete the wells will not damage them.
- Care is used to install/complete the wells.
- All documentation required by the specification has been received.
- Receipt of the materials had been documented.

At the CQA Monitor's discretion damaged wells may be rejected. Such wells or well components shall be removed from the site as designated by City of Vacaville.

5.3.2.2 Landfill Gas Monitoring Well Installation

Prior to LFGW installation/surface completion, the CQA Monitor shall verify that:

- Well placed in correct location.
- Proper materials and equipment onsite.

The CQA Monitor shall inform the CQA Officer and the Contractor/Installer if any of the above conditions are not met.

Typical construction inspection forms are presented in the Appendix.

5.3.3 Post-Construction

Upon completion of the LFGW installation, a post-construction inspection will be conducted of the completed wells by the CQA Officer and CQA Monitor to identify those areas that require corrective attention. The CQA Monitor will inspect the wells for the following:

- Condition of casing.
- Total depth.

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- Presence of soil or grout in well.
- Surface completion (overall condition).

If any of the above conditions is observed, the CQA Monitor will instruct the Contractor to repair the area in question to the CQA Officer's approval.

5.4 LANDSCAPING/EROSION CONTROL

Landscaping/erosion control inspection activities will be performed by the CQA Officer and CQA Monitor during hydroseeding activities and placement of the limited drip irrigation system and shrubs at the overlook area. Those activities are divided into pre-construction, construction, and post-construction activities.

The CQA Officer will conduct pre-construction training and information sessions with the CQA Monitor to familiarize the specified design, inspection policies, and procedures.

5.4.1 Pre-Construction

Pre-construction activities must be performed to provide an understanding of the work activities, design and construction requirements, material properties, and construction methods that will meet the design requirements of the landscaping. To accomplish this, a pre-construction meeting will be held between the City of Vacaville, the Design Engineer, the CQA Officer and CQA Monitor, and the Contractor (see Section 4.1). Construction procedures will be established with the goal of meeting or exceeding the design requirements.

Pre-construction activities of the CQA Officer and Monitor include:

- Review of all design criteria, construction plans, and specifications associated with planned hydroseeding landscaping, and irrigation.
- Review of the Contractor's work schedule.
- Review and approval of the construction methods and equipment to be used for placement of the hydroseed, planting of shrubs, and installation of the limited drip irrigation system.

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5.4.2 Construction

The CQA Officer and CQA Monitor will implement a CQA program to verify compliance with the requirements of the specifications and construction plans for the hydroseeding, landscaping and irrigation through construction observation.

Activities associated with this program have been broken down into the following categories:

- Irrigation system;
- Hydroseed/shrub planting;
- Repairs.

5.4.2.1 Hydroseed Application

During construction of the limited drip irrigation system, the CQA Monitor shall:

- Observe all phases of the construction and document the Contractor's compliance or noncompliance with the approved construction procedures, plans, and specifications.
- Perform periodic inspections of backfill.
- Record any damage to the underlying cover layer resulting from operation of equipment.

5.4.2.2 Repairs

Any areas of the limited drip irrigation system, planting, or hydroseeding which have not been accepted by the CQA Monitor shall be repaired in accordance with the specifications. The CQA Monitor shall locate and describe all repairs. Repair procedures include:

- Reconstruction and replacement of defective items.

All repairs shall be observed by the CQA Monitor and accepted prior to the post-construction inspection of the drainage structures. All repairs shall be documented by the CQA Monitor.

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5.4.2.3 Hydroseed/Shrub Planting

During placement of the hydroseed and shrubs, the CQA Monitor shall:

- Observe all phases of the construction and document the Contractor's compliance or noncompliance with the approved construction procedures, plans, specifications, and the directions of the Design Engineer.
- Verify pre-plant weed control is completed.
- Observe imported topsoil for proper characteristics and thickness
- Verify plant materials and seed mix meets specification guidelines
- Perform periodic inspection of hydroseed application and planting.

5.4.3 Post-Construction

Upon completion of the hydroseed application, planting and installation of irrigation a post-construction inspection shall be conducted by the CQA Monitor. The purpose of this inspection will be to identify those areas that require corrective attention by the Contractor. This will occur prior to final acceptance of the completed project. The CQA Monitor will inspect the irrigation and landscaping for the following:

- Areas that are improperly finished.
- Areas that have been damaged by construction activities
- Debris or other material that may impact the performance of the landscape

If any of the above conditions is encountered, the CQA Monitor will request the Contractor to initiate repair of the area in question in accordance with the specifications.

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6. DOCUMENTATION

Documentation of CQA activities will be maintained by the CQA Monitor under the direction of the CQA Officer.

6.1 DAILY RECORD KEEPING AND REPORTING

A daily summary report will be prepared with supporting inspection data sheets and records of any problems that occur, or corrective measures implemented throughout the day. The CQA Monitor will prepare a chronological daily summary report that includes the following:

- Date, name of project, and location. Weather and site conditions.
- Summary of the daily and other meetings conducted and the results of the meetings.
- Location of daily construction activities and progress.
- Record of equipment and personnel working in the work area.
- Location of work tested and areas passing final inspection.
- Documentation of soil samples collected for analysis including location, sample ID number, and analyses requested.
- Location of work tested and areas failing final inspection.
- Record of equipment calibrations or recalibrations of test equipment, and any actions taken as a result of recalibration.
- Record of site visits by non-project persons, including names and affiliations.
- Identification of construction problems and resolution to rectify these.
- Signature of CQA Monitor.

The daily summary report will include the inspection data sheets as appendices.

6.2 INSPECTION DATA SHEETS

All field observations and field testing will be recorded on inspection data sheets. Tests will be recorded on test sheets, observations will be recorded on inspection sheets. All field testing will follow standardized test procedures and methods of data recording, unless otherwise indicated in the specifications or construction plans. Observations in the field may take the form of notes, charts, drawings or sketches, photographs, or any combination of the above.

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The inspection data sheets will have the following information:

- Description and title of the inspection activity.
- Location of the inspection activity.
- Recorded observation and or test data, with all calculations completed and checked.
- Comparison of test results and observations with specification requirements.
- Names and titles of all persons involved in the inspection activity.
- A description of materials or workmanship which does not meet specified designs, including accurate record of location, extent and nature of deficiency.
- A record of corrective action measures, and the results of these measures.
- Signature of the CQA Monitor.

6.3 PHOTOGRAPHIC RECORD

Color photographs will be taken by the CQA Monitor at various points during construction to document field testing, construction activities and progress, and general inspection observations. Each photograph will have the following documentation:

- Identification which is cross-referenced to inspection data sheets.
- The date, time, and location the photograph was taken.
- The size, scale, and orientation of the subject matter photographed.
- Brief description of the work or subject matter.

6.4 ACCEPTANCE OF COMPLETED COMPONENTS

Daily inspection reports, inspection data sheets, and photographs will be reviewed by the CQA Officer for consistency, accuracy, and completeness. These reports will be reviewed in a timely manner.

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6.5 FINAL DOCUMENTATION

When construction activities are completed, a construction report prepared by the CQA Officer will be submitted to the City of Vacaville. This report prepared by the CQA Officer will include the following:

- Narrative, including but not limited to
    1. Project description.
    2. Project design team.
    3. CQA personnel.
    4. Contractor.
    5. Description of field inspection operations.
    6. Unusual conditions.
    7. Final quantities.
    8. Weather descriptions.
- Daily inspection summary reports.
- Inspection data sheets.
- Photographic reporting data sheets.
- Test results and locations.
- Acceptance reports.
- Description of any deviation from design and material specifications (with documentation providing justification).
- Construction record survey.
- Certification: The CQA Officer will certify that the construction was built according to the construction plans and specifications, and approved modifications of the plans and specifications as described in the construction report.

6.6 DOCUMENT CONTROL AND STORAGE

During construction, the CQA Officer will be responsible for the storage and retrieval of all CQA documents at the project site. The CQA Officer will keep duplicate records for all documentation at another location.

The CQA Officer will incorporate any revisions into the CQA plan, if required and will distribute revised copies to the Contractors and all other relevant parties.

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Upon construction completion, the CQA Officer will forward all original documents to the City of Vacaville for permanent storage. The City of Vacaville will be responsible that these documents will be stored in such a manner that they are protected from damage, yet easily accessed. All documentation will be maintained through the post-closure monitoring periods of the facility.

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7 LIMITATIONS

This CQA Plan was prepared in general accordance with accepted standards of care which exist in Northern California at the time the report was prepared. This CQA Plan is based on information obtained from the City of Vacaville. No warranty, expressed or implied, is made.

This document may be used only by the client and only for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both on site and off site) or other factors may change over time, and additional work may be required with the passage of time. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder from any liability resulting from the use of this document by any unauthorized party.

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APPENDIX

TYPICAL CONSTRUCTION INSPECTION FORMS

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CITY OF VACAVILLE
INSPECTOR'S DAILY CONSTRUCTION REPORT

PROJECT NAME

CONTRACTOR

DATE: 8/27/97 ***Wed.***

A.M.

P.M.

EQPT. No.	No. Men	DESCRIPTION (Of Equipment or Labor)									

CITY OF VACAVILLE
INSPECTOR'S DAILY CONSTRUCTION REPORT

PROJECT NAME

CONTRACTOR

DATE: 8/27/97 Wed.

Inspector's Signature

KLEINFELDER

110 Railroad Avenue, Suite E
Suisun, California 94585
(707) 429-4070

DAILY FIELD REPORT

DATE	JOB NO.
PROJECT	
LOCATION	
CONTRACTOR	OWNER
WEATHER	TEMP. °at AM °at PM
PRESENT AT SITE	
TYPE OF INSPECTION	

The following was noted:

Received & Acknowledged by:

Signed: _____
KLEINFELDER

Representing: _____ Date: _____

L29A

KLEINFELDER

DAILY FIELD REPORT

		Client Received ☐ Yes Copy of this Report ☐ No	Page of
File Number	Project Name	Location	Technician/Engineer
Date	Client	Contractor/Representative	Time Arrived
Daily Field Report Number	Source of Fill ☐ NATIVE ☐ IMPORT	Gauge Number / Mileage	Time Departed
Reviewed By	Location of Fill	Results Reported To	Travel Time (hours)
Date Reviewed	Specified Compaction	Weather	Total Time (hours) (May not include minimum)

Test Number	Test Location	Probe Depth (inches)	Test Elevation (feet)	Lab Max. Dry Density (lbs/cu ft)	Test Dry Density (lbs/cu ft)	Test Moisture %	% Of Max. Dry Density	Comments

Any unresolved test (date/number): _____

Observations/Remarks: _____

NOTES

1. Test results, pass/fail indications, and/or recommendations (if applicable) provided herein have not been reviewed by supervisory staff and, therefore, should be considered preliminary and subject to change.
2. Tests were conducted in general accordance with generally accepted testing procedures practiced within the site area at the time tests were performed.

KLEINFELDER REPRESENTATIVE

☐ Continued on next page.

08031130046

State of California
CIWMB 188
(Rev 01/07)

California Integrated Waste Management Board

Closed Disposal Site Inspection Report

Blue or Black Ink Pen

RECEIVED
JAN 29 2008

Page 1 of

Enforcement Agency: Solano County - Resource Management

For Official CIWMB Use Only
Received Date

FACILITY FILE NUMBER (99-xx-9999): 48-CR-0002

INSPECTION DATE (MM/DD/YYYY): 12/27/2007

PROGRAM CODE *(Select only one code)*
(•) LEA Periodic ( ) CIWMB Closed Sites ( ) CIWMB Focused
( ) LEA Focused ( ) CIWMB Enforcement Agent ( ) CIWMB Periodic

Time In:
Time Out:
Inspection Time

By
( ) Attachments On File (Not Scanned)

Facility Name
Vacaville Browns Valley Closed Landfill

Facility Location
Browns Valley Road, Vacaville

Inspector
Ed Padilla

Inspector Signature
Ed Padilla

Received By (Operator) Signature
Mailed

Owner Signature (if present)
Not present

Also Present (Name)
Marcy Mackenzie, Rollie Smons

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF THE PUBLIC RESOURCES CODE (PRC), AND TITLE 14 AND TITLE 27 CALIFORNIA CODE OF REGULATIONS (CCR).

THE STANDARDS BELOW ARE CONSIDERED IN COMPLIANCE UNLESS OTHERWISE MARKED WITH ONE OF THE FOLLOWING: V=VIOLATION A=AREA OF CONCERN

POSTCLOSURE	V	A
20750 - SITE MAINTENANCE	○	○
21180 - POSTCLOSURE MAINTENANCE	○	○
21190 - POSTCLOSURE LAND USE	○	○
GAS MONITORING AND CONTROL SYSTEMS		
20918 - EXEMPTIONS	○	○
20919 - GAS CONTROLS	○	○
20919.5 - EXPLOSIVE GAS CONTROL	○	○
20921 - GAS MONITORING AND CONTROLS	○	○
20923 - MONITORING	○	○
20925 - PERIMETER MONITORING NETWORK	○	○
20931 - STRUCTURE MONITORING	○	○
20932 - MONITORED PARAMETERS	○	○
20933 - MONITORING FREQUENCY	○	○
20934 - REPORTING	○	○
20937 - CONTROL	○	○
GRADING/FINAL COVER		
20650 - GRADING OF FILL SURFACES	○	○
21140 - FINAL COVER	○	○
21142 - FINAL GRADING	○	○
21145 - SLOPE STABILITY	○	○
	○	○

DRAINAGE AND EROSION CONTROL	V	A
20820 - DRAINAGE/EROSION	○	○
21150 - DRAINAGE/EROSION CONTROL	○	○
MONITORING AND CONTROL SYSTEMS		
20790 - LEACHATE CONTROL	○	○
20830 - LITTER CONTROL	○	○
21160 - LF GAS CONTROL/LECHATE CONTACT	○	○
SECURITY		
20530 - SITE SECURITY	○	○
21135 - SECURITY AT CLOSED SITES	○	○
21137 - STRUCTURAL REMOVAL	○	○
RECORDS		
21130 - EMERGENCY RESPONSE PLAN	○	○
21170 - RECORDING	○	○
21200 - CHANGE OF OWNERSHIP	○	○
CLOSURE PLANS		
21880 - CERTIFICATION OF CLOSURE	○	○
21890 - REVISION OF APPROVED PLANS FOR C/PC MAINTENANCE	○	○
OTHER		
	○	○
	○	○
	○	○

Comments: *(Note: for additional or continued comments use the CIWMB 03 or attach additional pages.)*

No Violations observed.
Landfill Gas measurement taken at monitoring well site: 0 ppm

INSTRUCTIONS ON BACK Correct: ○ Incorrect: ⊘ ✓ EXAMPLE 123

Top White - CIWMB Middle Pink - LEA Bottom - Yellow

13016130002

State of California
CIWMB 1188
(Rev. 01/01)

California Integrated Waste Management Board

Closed Disposal Site Inspection Report

Blue or Black Ink Pen

Enforcement Agency: Solano County - Resource Management

For Official CIWMB Use Only
Received Date:
RECEIVED
JAN 08 REC'D
Attachments On File (Not Scanned)

FACILITY FILE NUMBER (99-xx-9999): 48-CR-0002

INSPECTION DATE (MM/DD/YYYY): 12/13/2012

PROGRAM CODE (Select only one code)
(●) LEA Periodic ( ) CIWMB Closed Sites ( ) CIWMB Focused
( ) LEA Focused ( ) CIWMB Enforcement Agent ( ) CIWMB Periodic

Time In: 1:15 pm
Time Out:
Inspection Time

Facility Name: Vacaville Browns Valley Closed Landfill

Facility Location: Browns Valley Road, Vacaville

Inspector: Ed Padilla

Inspector Signature: Ed Padilla

Received By (Operator) Signature: Mailed

Owner Signature (if present): Not present

Also Present (Name):

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF THE PUBLIC RESOURCES CODE (PRC), AND TITLE 14 AND TITLE 27 CALIFORNIA CODE OF REGULATIONS (CCR).

THE STANDARDS BELOW ARE CONSIDERED IN COMPLIANCE UNLESS OTHERWISE MARKED WITH ONE OF THE FOLLOWING: V=VIOLATION A=AREA OF CONCERN

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GAS MONITORING AND CONTROL SYSTEMS		
20918 - EXEMPTIONS	○	○
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20919.5 - EXPLOSIVE GAS CONTROL	○	○
20921 - GAS MONITORING AND CONTROLS	○	○
20923 - MONITORING	○	○
20925 - PERIMETER MONITORING NETWORK	○	○
20931 - STRUCTURE MONITORING	○	○
20932 - MONITORED PARAMETERS	○	○
20933 - MONITORING FREQUENCY	○	○
20934 - REPORTING	○	○
20937 - CONTROL	○	○
GRADING/FINAL COVER		
20650 - GRADING OF FILL SURFACES	○	○
21140 - FINAL COVER	○	○
21142 - FINAL GRADING	○	○
21145 - SLOPE STABILITY	○	○

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20530 - SITE SECURITY	○	○
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21137 - STRUCTURAL REMOVAL	○	○
RECORDS		
21130 - EMERGENCY RESPONSE PLAN	○	○
21170 - RECORDING	○	○
21200 - CHANGE OF OWNERSHIP	○	○
CLOSURE PLANS		
21880 - CERTIFICATION OF CLOSURE	○	○
21890 - REVISION OF APPROVED PLANS FOR O/PC MAINTENANCE	○	○
OTHER		
	○	○
	○	○
	○	○

Comments: *(Note: for additional or continued comments use the CIWMB 03 or attach additional pages.)*

No Violations observed.

Using the RKI Eagle Gas Monitor.
Ambient Air reading on top of landfill - 0 ppm methane

INSTRUCTIONS ON BACK

Correct: ● Incorrect: ⊘ ✓ ✓

EXAMPLE 123

Top White - CIWMB Middle Pink - LEA Bottom - Yellow

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INTERVIEW QUESTIONNAIRE
PHASE I ENVIRONMENTAL SITE ASSESSMENT
Compatible with ASTM Standard E1527-21

Site Name: Centennial Park

Site Address: 270 Browns Valley Parkway, Vacaville, CA 95688

Date: 3/20/24

Interviewer: Erin Abendroth

Interviewee: Hew Hesterman

Site Association: Park planner for the City of Vacaville

Years Associated: 18 years

Please answer the following questions to the best of your knowledge.

1. Was the property or adjoining property ever used for industrial purposes (e.g. manufacturing) or as a gas station, dry cleaners, waste treatment, processing facility, motor repair facility, photo lab, commercial printing facility, junkyard/disposal/recycling/ landfill? If yes, please list the activity, hazardous substances used, and approximate dates when the activity occurred.

   Prior land use, hazardous substances used, and dates:
   Closed landfill located approximately 20ft north of tennis court areas. Wastewater treatment spreading zone located east of the baseball fields. The wastewater was not chemically treated.
   Prior owners, key site managers/operators, occupants and dates:
   Dale Pfifer - retired director of public works
   Tanya Skau - engineer who worked on closures of the landfill and wastewater treatment facility, retired

   Existing or prior structures used for what purposes and duration:
   2ft thick clay cap covering the former landfill

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2. Do any of the following documents exist for the site or any portion of the site? If so, can you provide Kleinfelder with a copy? (This question to be asked before site visit).

- [x] Environmental site assessment reports — Phase II reports associated with closure of waste water treatment facility and landfill
- [ ] Environmental compliance audit reports
- [ ] Environmental permits
- [ ] Underground Storage Tank registration
- [ ] Underground Injection System registration
- [ ] Material Safety Data Sheets
- [ ] Community Right-To-Know Plan
- [ ] Safety plans: preparedness and prevention plans; spill prevention; countermeasure; and control plans, etc.
- [ ] Reports regarding hydrogeologic conditions on the property or surrounding area;
- [ ] Correspondence from any government agency relating to past or current violations of environmental laws with regard to the property or relating to environmental liens encumbering the property
- [ ] Hazardous waste generator notices or reports
- [ ] Geotechnical studies
- [ ] Risk assessments
- [x] Recorded Activity and Use Limitations (AULs) — Not to disturb landfill cap

3. Have you ever observed evidence of or do you have prior knowledge of any of the following items being used, stored, discarded, dumped above grade, buried, or burned onsite? Circle all that apply and indicate amount and approximate dates.

MATERIAL	QUANTITY	DATE(S) OBSERVED	COMMENTS
Above ground storage tank (AST)*			Size: Contents: Condition:
Automotive batteries			
Industrial batteries			
Pesticides (>5 gallon)			park & maintenance uses herbicides
Paints (> 5 gallon)			
Chemicals/Hazardous Substances (> 5-gallon liquid)			

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MATERIAL	QUANTITY	DATE(S) OBSERVED	COMMENTS
Chemicals/Hazardous Substances (dry sacks, containers, etc.)			general cleaning and park maintenance supplies
Industrial drums (typically 55 gallons)			Contents: Condition:
Transformer or other equipment that may contain PCBs (e.g. hydraulic equipment)*			Installation date:
Underground storage tank*			Size: Contents: Condition:
Unknown materials you suspect may be hazardous substances			Describe: occasional dumping by public.

*Please provide records if available.

4. What method(s) is used to contain spills of hazardous waste?

spill kits

5. What method(s) is used to dispose of hazardous waste?

Vacaville Recology collects solid waste.
No hazardous waste.

6. Are there any permits for handling, use, storage, or disposal of hazardous waste?

No.

7. Have you observed evidence of or have prior knowledge of the following onsite?

MATERIAL	QUANTITY	DATE(S) OBSERVED	COMMENTS
Equipment Maintenance Areas	2		maintenance areas for the ball fields
Accidental spills or releases of chemicals or petroleum products			

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MATERIAL	QUANTITY	DATE(S) OBSERVED	COMMENTS
Possible asbestos containing materials (e.g. pipe, building, etc.)			Describe material: none
Fill dirt originating from an unknown or contaminated site?			Source: sand fill under soccer field, landscaping fill
Pits, ponds, or lagoons associated with waste treatment or waste disposal?			Location: borrow pit from prior landfill
Stained soil or odiferous soil? (e.g. oily black)			Location:
Sumps or dry wells*			Size : 5 monitoring wells, maybe more Contents : Condition :
Vent pipes, fill pipes, access ways to a fill pipe protruding from the ground or adjacent to a structure onsite?			Location: none
Heating and cooling systems (include fuel source)			Source: none
Flooring, drains, walls that are stained or emitting a foul odor (do NOT include water damage)?			Location: none

*Please provide records if available.

8. Is the property served by a private well or non-public water system? If so, please answer the following: No

   a. Was the well used for domestic (D), agricultural irrigation (I), or monitoring (M) purposes? Are the wells currently operational and if not, when were they last used? When was the well drilled? How deep is the well? What is the approximate discharge rate?

Well No.	Type	Operating?	Last Used	Date Drilled	Depth	Discharge Rate	Location
1-							
2-							

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b. Have the wells been sampled for contaminants that exceed applicable requirements for the designated use (e.g., Drinking Water Standards)? If so, please provide the dates and copies of well records.

c. Has the well or water system been designated by any governmental environmental/health agency as contaminated?

9. Is there an oil/gas well or oil/gas vent located onsite? If so, please indicate the location. Please supply any documents available.

No.

10. Is the property or has the property to your knowledge been previously served by a septic system? If so, please indicate the location of the tank and leach lines (if applicable) and list any hazardous materials disposed.

No.

11. Does the property discharge wastewater into a storm water sewer system or a sanitary sewer system onto or adjacent to the property? If so, please describe location, piping flow, quantity discharged, and water quality.

Stormdrain system in parking lots and field areas discharge to surface water. Restrooms discharge to city sewer system.

12. Do you have knowledge of the following with respect to the property? Circle and explain all that apply.

a. Environmental clean-up, ongoing or pending.

b. Environmental liens

c. Governmental notifications regarding any possible past or present violations of environmental laws.

d. Past, threatened, pending lawsuits or administrative proceedings relevant to a release of a hazardous substance or petroleum product, in, on, or from the property.

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e. Prior environmental assessment that indicated the presence of hazardous substances, petroleum hydrocarbons, contaminants, or recommended further assessment. Phase II reports, slightly elevated metals in monitoring wells

f. Deed Restrictions

g. Citizen complaints regarding activities onsite

AGRICULTURAL SITES:

13. What crops have been grown onsite, currently and in the past?

CROP	DATE	LOCATION

If crops are present or have been grown, please answer questions 14 through 16 below:

14. Have pesticides been applied to fields or other portions of the site? If so, please answer the following questions:

    a. List the names of pesticides (includes herbicides, fungicides, insecticides, rodenticide) used and dates applied.

PESTICIDE AND BRAND NAME	DATE	CROP OR ANIMAL USE

DRAFT

b. Have you been notified of any violation of environmental law with respect to application or storage of pesticides?

No.

c. Location of pesticide mixing areas, if any (past or present)?

None.

d. Method of pesticide application?

Pesticides are not used. Herbicides are applied by park maintenance using pressurized sprayers on vehicles and/or backpacks.

15. Have fertilizers been applied to the site? What type and method of application?

Fertilizers are applied 1-2 times per year in baseball and soccer field areas.

16. Are there any buried pipelines for irrigation or other purposes onsite? If so, what materials is the piping constructed of? Asbestos containing material, PVC, other? Describe the location of buried piping.

Sewer - VCP
Stormdrain - RCP
Irrigation - PVC
Electrical - PVC / polyethylene

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APPENDIX D

HISTORICAL RESEARCH DOCUMENTATION

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Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688

Inquiry Number: 7593477.3
March 12, 2024

Certified Sanborn® Map Report

DRAFT

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

03/12/24

Site Name:

Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688
EDR Inquiry # 7593477.3

Client Name:

Kleinfelder, Inc.
24411 Ridge Rte Dr Suite 225
Laguna Hills, CA 92653
Contact: Stefan Birardi

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # EBCA-4952-8D38

PO # NA

Project 24005105.001A

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: EBCA-4952-8D38

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Centennial Park

270 Browns Valley Parkway

Vacaville, CA 95688

Inquiry Number: 7593477.11

March 12, 2024

The EDR Aerial Photo Decade Package

DRAFT

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

03/12/24

Site Name:

Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688
EDR Inquiry # 7593477.11

Client Name:

Kleinfelder, Inc.
24411 Ridge Rte Dr Suite 225
Laguna Hills, CA 92653
Contact: Stefan Birardi

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2020	1"=875'	Flight Year: 2020	USDA/NAIP
2016	1"=875'	Flight Year: 2016	USDA/NAIP
2012	1"=875'	Flight Year: 2012	USDA/NAIP
2009	1"=875'	Flight Year: 2009	USDA/NAIP
2006	1"=875'	Flight Year: 2006	USDA/NAIP
1993	1"=875'	Acquisition Date: June 16, 1993	USGS/DOQQ
1984	1"=875'	Flight Date: June 08, 1984	USDA
1974	1"=875'	Flight Date: July 18, 1974	USGS
1968	1"=875'	Flight Date: May 28, 1968	USGS
1952	1"=875'	Flight Date: August 02, 1952	USDA
1937	1"=875'	Flight Date: August 25, 1937	USDA

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INQUIRY #: 7593477.11
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EDR


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YEAR: 2016
= 875'
N
EDR

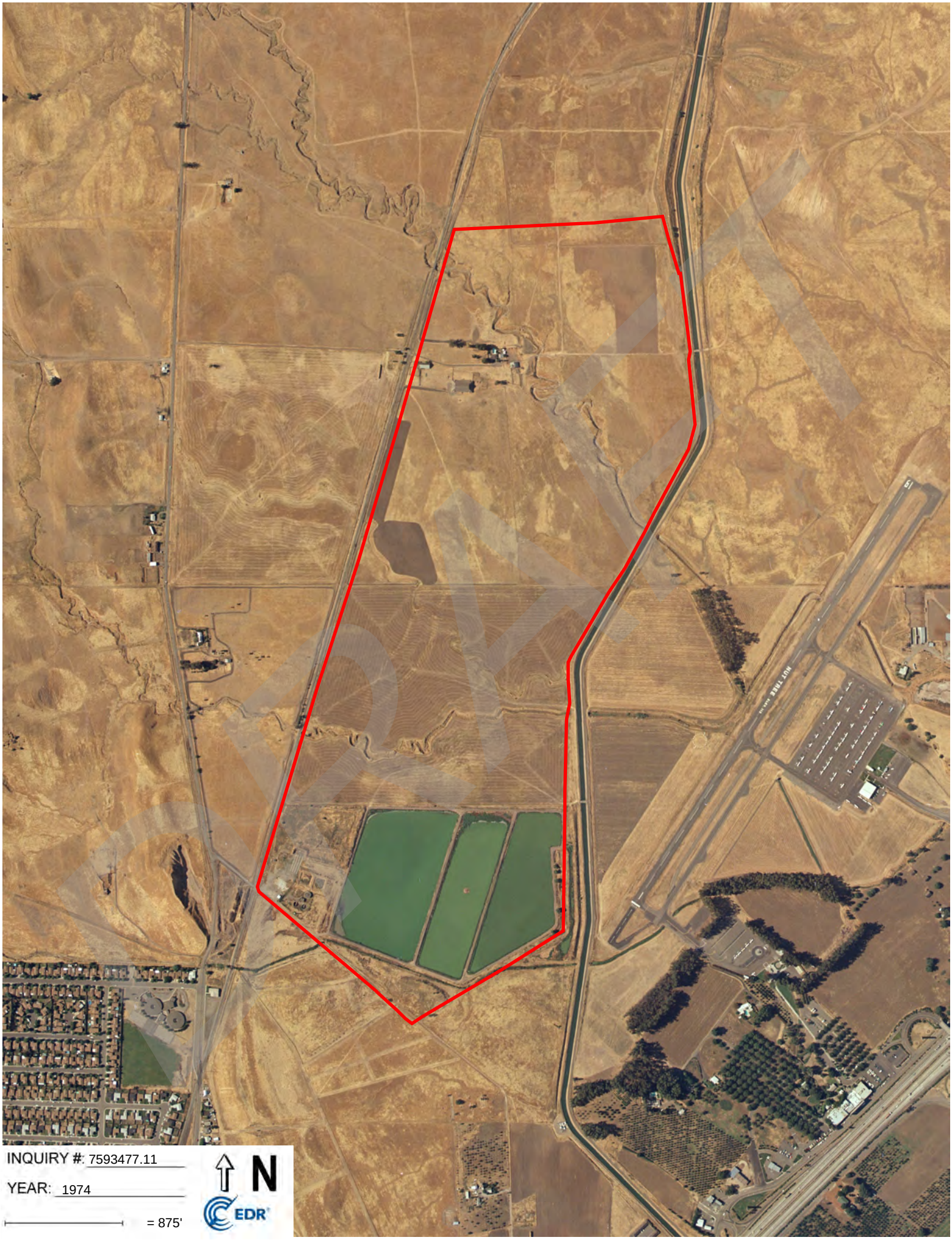

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EDR

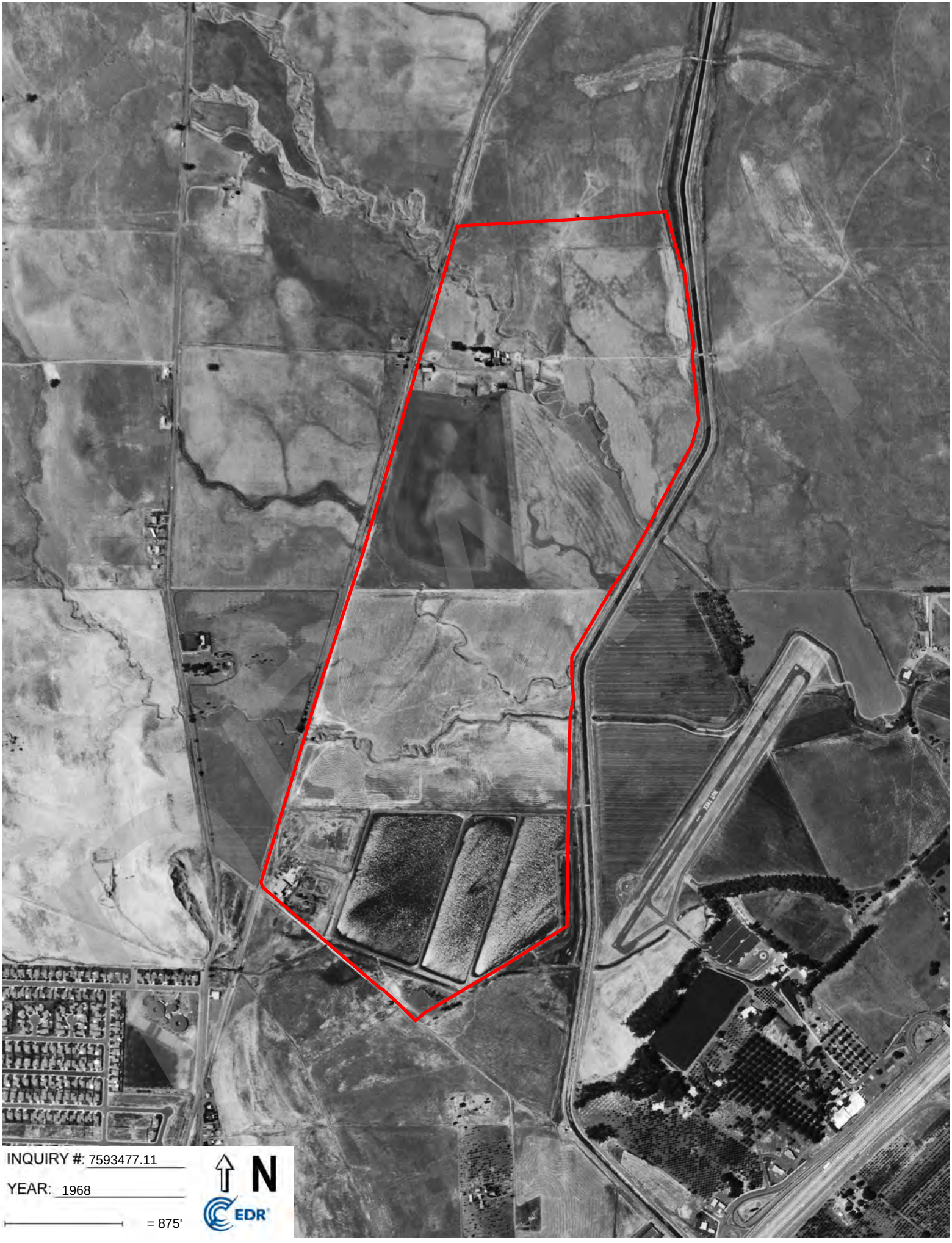

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EDR

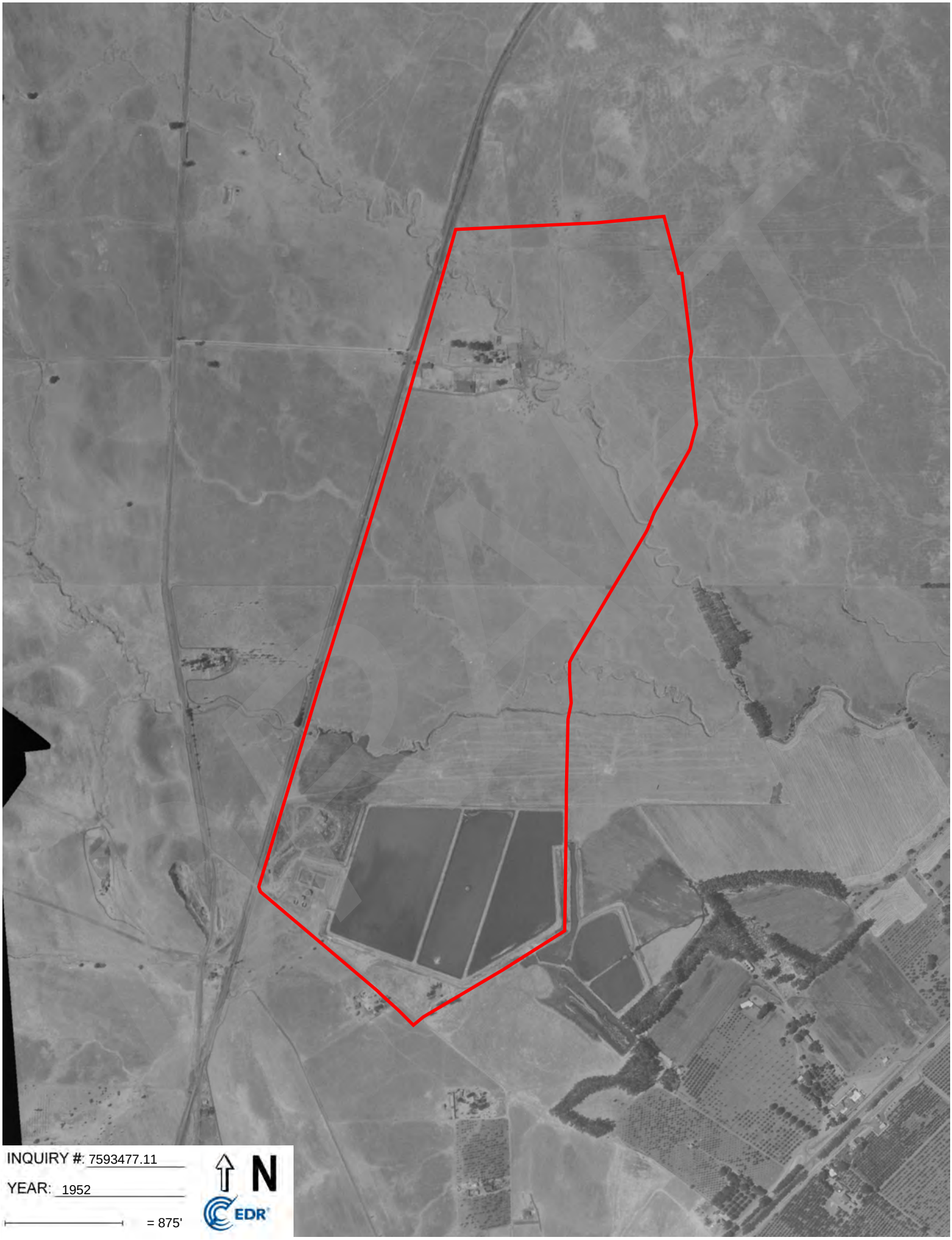

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YEAR: 2006
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EDR

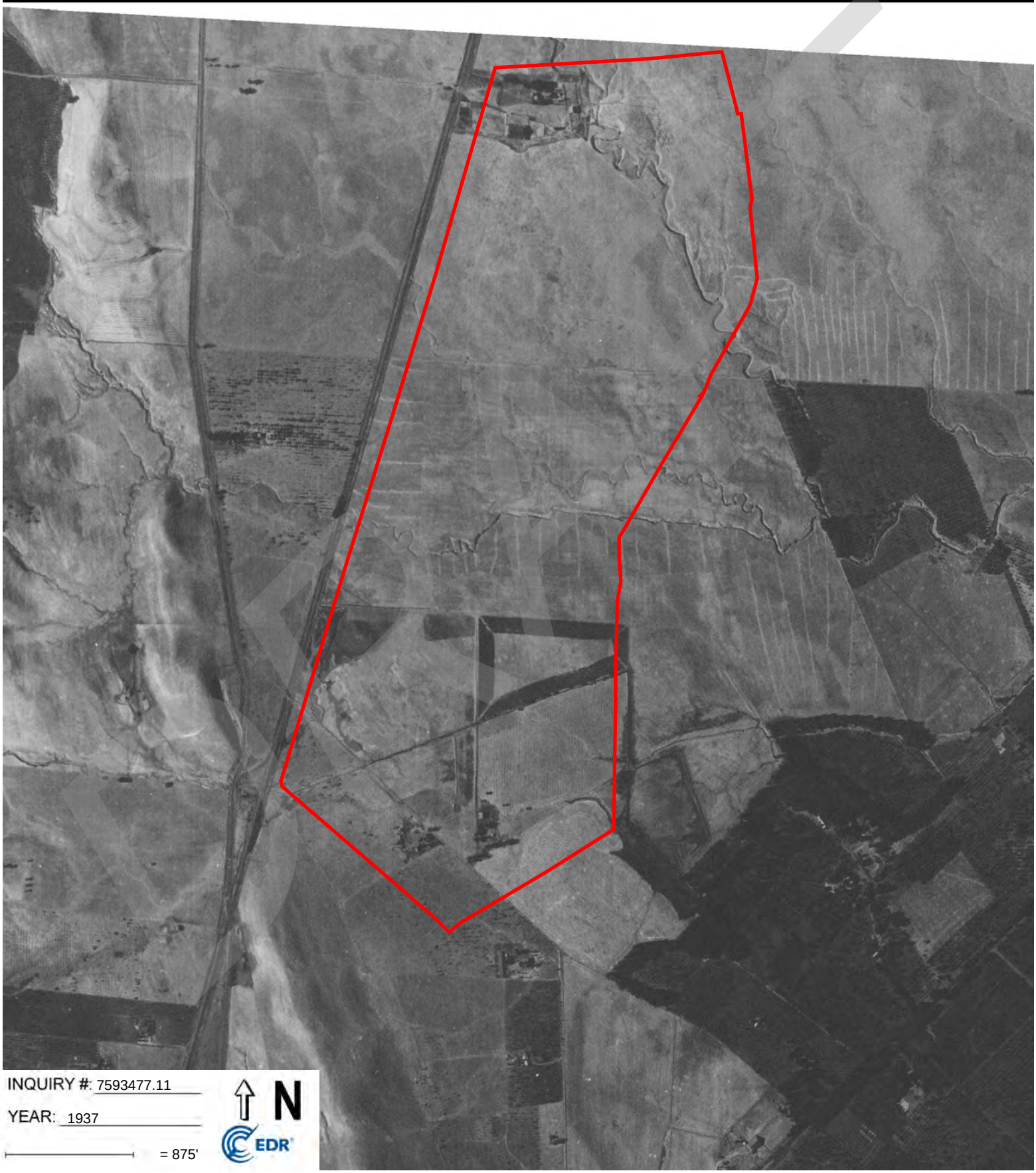

INQUIRY #: 7593477.11
YEAR: 1993
= 875'
N
EDR


INQUIRY #: 7593477.11
YEAR: 1984
= 875'
N
EDR


INQUIRY #: 7593477.11
YEAR: 1974
= 875'
N
EDR


INQUIRY #: 7593477.11
YEAR: 1968
= 875'
N
EDR


INQUIRY #: 7593477.11
YEAR: 1952
= 875'
N
EDR


INQUIRY #: 7593477.11
YEAR: 1937
= 875'
N
EDR

Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688

Inquiry Number: 7593477.5
March 14, 2024

The EDR-City Directory Image Report

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EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2020	☑	☑	EDR Digital Archive
2017	☑	☑	Cole Information
2014	☑	☑	Cole Information
2010	☑	☑	Cole Information
2005	☑	☑	Cole Information
2000	☑	☐	Cole Information
1995	☑	☐	Cole Information
1992	☑	☐	Cole Information
1986	☐	☐	Haines Criss-Cross Directory
1981	☐	☐	Haines Criss-Cross Directory
1977	☐	☐	Haines Criss-Cross Directory

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FINDINGS

TARGET PROPERTY STREET

270 Browns Valley Parkway
Vacaville, CA 95688

Year	CD Image	Source	
BROWNS VALLEY PKWY			
2017	pg A9	Cole Information	
2014	pg A14	Cole Information	
2010	pg A19	Cole Information	
2005	pg A25	Cole Information	
2000	pg A26	Cole Information	
1986	-	Haines Criss-Cross Directory	Street not listed in Source
1981	-	Haines Criss-Cross Directory	Street not listed in Source
1977	-	Haines Criss-Cross Directory	Street not listed in Source
BROWNS VALLEY PKY			
2020	pg A4	EDR Digital Archive	
1995	pg A27	Cole Information	
1992	pg A28	Cole Information	

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FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
ALLISON DR			
2020	pg. A2	EDR Digital Archive	
2017	pg. A5	Cole Information	
2014	pg. A10	Cole Information	
2010	pg. A15	Cole Information	
2005	pg. A20	Cole Information	
2000	-	Cole Information	Target and Adjoining not listed in Source
1995	-	Cole Information	Target and Adjoining not listed in Source
1992	-	Cole Information	Target and Adjoining not listed in Source
1986	-	Haines Criss-Cross Directory	Street not listed in Source
1981	-	Haines Criss-Cross Directory	Street not listed in Source
1977	-	Haines Criss-Cross Directory	Street not listed in Source

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City Directory Images

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Target Street	Cross Street	Source
-	✓	EDR Digital Archive

ALLISON DR 2020

1000	AGRIPINA JIMENEZ
	AGUSTIVE HERMES
	ALFRED CARIG
	ALICIA CARRILLO
	ANALIZA JIMENEZ
	ANGELA ENRIQUEZ
	ANGELA MACHEN
	ANGELINA MILIAN
	ARIEL EDELMAN
	ARON SCHROEDER
	ARRIAGA RYAN ALLAN
	BARBARA COMPTON
	BRANDON CULVER
	CAMILLE CANNON
	CARLO SAYO
	CARRIE HOOK
	CHAD MEISENHEIMER
	CHELSEA JIMENEZ
	CHRIS TERRY
	CURLEY REED
	CYNTHIA BLAKE
	DALKIS HICKS
	DANIEL BENSON
	DANZEL BRADSHAW
	DONNA COOLEY
	ELECTRIC CHARGING STATION
	EMILIE HENRY
	ENRIQUE JIMENEZ
	FELIPE CARRILLO
	GARY MCGRANAHAN
	GERALD COOLEY
	HENRY HOOK
	HOWARD MUTO
	INGRID RANDAZZO
	JACK BERKHEIMER
	JAMES MUNCY
	JAMES PORTER
	JENNIFER FRAZIER
	JOSEPH PUREFOY
	JUDITH MC GRANAHAN
	KARLA BELTZ
	KELLI HOOK
	KIMBERLEY MEISENHEIMER
	KYLE HOOK
	LENORE BREEDLOVE
	LISA ZELLER
	LOUIS GEORGE
	MORGAN SHEPHERD
	NATHALIE BENSON
	PAMELA BERKHEIMER

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Target Street	Cross Street	Source
-	✓	EDR Digital Archive

ALLISON DR 2020 (Cont'd)

1000	PAUL ENRIQUEZ
	PAUL HILL
	QUENNIE CARIG
	RICARDO ENRIQUEZ
	RIVER OAKS APARTMENT HOMES
	ROBERT FLORES
	RUDOLF HORNBACH
	SAMUEL PRESCOTT
	SCOTT BERKHEIMER
	SHANNON TODD
	SHANTELL GARCIA
	SHARON FLORES
	SONYA ELDER
	SPENCER TOTTEN
	STEPHEN LYNCH
	STEVE HOPKINS
	SUZANNE NARDELLA
	THERESA BATES
	THOMAS TERRY
	THOMAS TERYL
	TRACEY RUFF
	TYREL RUFF
	VELMA LAWRENCE
	VICTOR DURU
	WALTER BERKHEIMER
	WILLIAM COLLISON
	WILLIAM SHEPHERD
	ZACHARY BERKHEIMER
1001	VACAVILLE CITY COACH
	VACAVILLE PARK MAINTENANCE
	VACAVILLE PUBLIC WORKS
	VACAVILLE RECYCLING INFO
	VACAVILLE STREETLIGHT OUTAGES
	VACAVILLE TRANSPORT CTR
1200	STRADA 1200
1500	ATM
2001	QUICK LANE

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Target Street	Cross Street	Source
✓	-	EDR Digital Archive

BROWNS VALLEY PKY 2020

100	NATION'S GIANT HAMBURGERS
102	CROWN REALTY PROPERTY MA
104	STATE FARM INSURANCE
120	ATM
	WELLS FARGO BANK
128	BED BATH & BEYOND
	KEY ME
130	ATM
	COINSTAR
	NUGGET MARKETS
132	ATM
	DEMARAY POOL SUPPLY
	RICE BARN
140	ROUND TABLE PIZZA
	SPRINT
144	VACAVILLE CLEANERS
146	PARKWAY FOOD & LIQUOR
148	HAWAII NAILS & SPA
152	GREAT CLIPS
154	PLANET FITNESS
	SAVERS
155	ATM
	CENTRAL SOLANO USBC
	CITY SPORTS BAR & GRILL
	ELECTRIC CHARGING STATION
	STARS RECREATION CTR
	VACAVILLE GARAGE DOOR REPAIR
270	CENTENNIAL PARK

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2017

1000 ADAMS, ROBERT B
AMIN, ADAM A
ANDERSON, BRITTANY C
ANDRADE, JUAN C
ANDREWS, LEATHA D
ANDRIEU, CHRISTOPHER
ANONAS, ANDREA A
ARNOLDY, DOUGLAS G
ARROYO, GONZALO A
AWWAD, SAAD
BALLARD, CHIMERE
BARTLE, JOSEPH M
BECKLEY, JOSEPH I
BEDELL, ROBERT
BERGMAN, GAGE
BERRY, JESSICA P
BHEEMREDDY, THRISHUL
BREEDLOVE, LENORE G
BREGAR, JENNIFER J
BROOKS, JEFFREY
BROWN, RACHEL
BUSTAMANTE, DEXTER
BUTLER, GLEN
CAMACHO, DUANE
CAMPBELL, CHRISTOPHER R
CANNON, CAMILLE M
CARDIEL, IVAN
CARIG, ALFRED L
CARRILLO, FELIPE
CASHMAN, PYHRRHA
CAVALIERE, VINCENT J
CLARK, SCOTT
COGSWELL, ANGELA
COHEN, JOSHUA M
CONYERS, ASHLEY
COOLEY, GERALD S
CORNICO, OLIVIA
CORREA, LEONILA E
COWDREY, LAINE O
CUSTA, DIANA M
DEVINE, HEATHER
DILLON, ZACHARY O
DITULLIO, PATRICK
DOWELL, TERRY L
DURAN, MADALYNNE
FERNANDES, FAYE E
FINDLAY, ROBERT A
FLORES, RAFAEL
FONOTI, CURTIS
FRANKL, JASON H

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2017 (Cont'd)

1000 FREEMAN, RYAN A
FREESTONE, ALYAH D
FRIGON, ROBERT T
FRY, CAITLIN P
GARCHA, RANJIT S
GARCIA, MONTES M
GAUTHIER, TIM
GERGURICH, ZACHERY R
GETHINGS, VINCENT A
GINGRAS, JAMES G
GONZALEZ, MICHELLE
GRAY, TORRIN E
GREEN, DANIELLE
GRIFFIN, ELISE D
GRUENEWALD, JILLIAN R
HENRY, EMILIE L
HERMES, AUGUSTIVE A
HERNANDEZ, ROBERTO
HERNDON, MEREDITH
HOFFMAN, PAUL L
HOLMES, LORENZO
HOOK, CARRIE M
HOPKINS, STEVE
HORNBACH, RUDOLF A
HUDAK, JOSEPH D
HUGHES, MIKAYLA E
ISRAEL, GLEE L
JOHNSON, CASSANDRA
JOHNSON, ROBERT
JONES, JASON
JONES, KENNETH
JUAN, MARIE
KALAPOTHAKOS, ANGELA
KELLEHER, MATTHEW K
KELLING, CYNTHIA A
KENT, KENNETH L
KLEIN, RICHARD L
LABAR, RENEE A
LANDERS, CHESTER E
LARGENT, LINDA D
LAUWERIJSSEN, ALEXANDRA T
LEDESMA, ALEXIS
LEE, JOHN Y
LENZ, JEANETTE M
LOUIS, GEORGE T
LOWENSTEIN, RYAN W
LYNCH, STEPHEN R
MARAGLIANO, BEN D
MASON, SHAURNET
MCBRIDE, SHEAN

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2017 (Cont'd)

1000	MCDONALD, SEAN
	MCGRANAHAN, GARY J
	MELONUK, RILEY
	MIGUEL, MARK
	MIYASHIRO, SCOTT
	MONTEITH, MEGAN
	MOON, DARRELL W
	MOYE, SANDRA
	MUNAR, FLORIMOND P
	NICHOLS, MICHAEL E
	OBIOLS, MARIA
	OUCHI, MIHEKO L
	PARTIN, MICHAEL E
	PECH, SUNDY
	PELAYO, ROSA E
	PERRY, NATHAN L
	PETERSEN, ANTHONY
	PETERSON, JERRY D
	PLANTE, BRIGITTE
	POE, ANN M
	PRATT, PAUL
	PRATT, SHANTEA
	PRESCOTT, SAMUEL H
	PRESLEY, AVELINA
	RAPOLLA, SANTIAGO T
	REYES, LUIS D
	RICHARDSON, AMANDA R
	RICHTER, KATHERINE M
	RILEY, PATRICIA A
	RIVER OAKS APARTMENT HOMES
	RIVER OAKS APARTMENTS
	ROBINSON, RICHARD C
	ROBINSON, TOMMY O
	RODRIGUEZ, PRICILLA
	RUSSO, KENDALL
	SANCHEZ, MARIA
	SCHAFFER, FRANK
	SHULIN, SCOTT R
	SIDHU, SIMARJIT
	SIMONS, BRANDON
	SIMS, CARLY
	SINCLAIR, ANDREA
	SMITH, SHANNON N
	SOBBA, TETYANA
	SORAH, MELLISSA B
	STRONG, JUDITH I
	SUITT, JOHN
	SUMPTER, NICOLE R
	SUTHERLAND, SUSAN K
	TABORA, LAUREN

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2017 (Cont'd)

1000 TAN, CYNTHIA S
TERYL, THOMAS H
TEYMOURI, MITRA
THELEN, PHUONG W
THOMAS, GEORGE W
THURMAN, MARIO
TJADER, SIERRA
TONNU, CHAU
TOTTEN, SPENCER B
TOWNSEND, MIKE K
VIJ, MANNIKA
VILLAR, FLORANTE C
WILLIAMS, BRENDA L
WILLIAMS, DEWESELY
WILLIAMSON, LIZ M
WILLIS, LYNN M
WOLF, JOHN B
ZELL, STEVEN

DRAFT

Target Street	Cross Street	Source
✓	-	Cole Information

BROWNS VALLEY PKWY 2017

100	NATIONS GIANT HAMBURGERS
102	CROWN REALTY PROPERTY MANAGEMENT
	IZZIES WIRELESS
104	PIGNATARO INS ANDY AGT
	STATE FARM INSURANCE
120	WELLS FARGO BANK
128	BED BATH & BEYOND
130	NUGGET MARKETS
132	DEMARAY POOL SUPPLY
140	ROUND TABLE PIZZA
144	VACAVILLE CLEANERS
146	PARKER LIQUOR
148	HAWAII NAILS & SPA
154	SAVERS
155	BANK OF AMERICA ATM
	CENTRAL SOLANO USBC
	CITY SPORTS BAR & GRILL
	KEVINS PRO SHOP

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2014

1000
ADAM, BRIAN
ADAMO, EDWARDA M
AGUILAR, CARLOS
ALLEYNE, NILKA K
ANGUIANO, ALMA L
ANONAS, ANDREA
ARELLANO, IRMA E
ARNETT, CYNTHIA D
BAGGETT, MARK L
BARELA, ROSANNE C
BECK, HEIDI
BENNETT, DAVID
BENSON, DAVID J
BERTELL, NICHOLAS
BLAIR, MISTY M
BROOKS, REBECCA
BRUNER, JEREMY A
CAMBRIDGE, MICHELLE E
CAMPBELL, CHRISTOPHER R
CARBULLIDO, SARAHLYNN
CARNES, DANA
CARSON, SANDRA E
CAUWELS, LESLIE
CHOE, HAK
COLON, MICHELLE
COMPTON, BARBRA R
CONWAY, CHRIS
COOLEY, GERALD S
COOPER, JOSH D
CORREA, LEONILA E
DAVENPORT, SHAWNA
DELCASTILLO, KAREN
DENNIS, ASHLEIGH L
DEXTER, BEVERLY A
DODSON, KIMBERLY A
EARP, SARAH N
EMERICK, STEPHEN O
ERICKSON, BREE A
ESDELL, NICOLE
EVA, ED
FAISON, MICHAEL R
FARMER, LINDSAY
FEIST, VALERIA
FERRARO, JOSEPH S
FOSS, MARK
FRANKL, JASON H
FREEMAN, RYAN A
FRENCH, JENNIFER
FRUTIG, AUSTIN
FULLER, CRYSTAL J

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2014 (Cont'd)

1000 GILBERT, MICHAEL
GLOVER, DON
GOLDFARB, JEREMY
GUAJARDO, MICHAEL
GUZMAN, PABLO
HAYNES, MICHAEL C
HENRY, TRISHA
HOPKINS, STEVE
HOUSING PC
HOWARD, MONICA
HUDAK, JOSEPH D
HUTCHINSON, ADRIANNA N
ISAAC, TINA
JARVIS, BECKY E
JEWETT, KEITH
JOHNSON, ERIC
JOHNSON, JOHN E
JUAN, MARIE
JUAREZ, TANIA
KAWAMURA, LINDA
KEARNEY, BRITTANY M
KELLEHER, MATTHEW K
KELLING, CYNTHIA A
KIM, TIMOTHY
KLEIN, RICHARD L
KONING, LYNDA
KONSTANTIN, JOHN
KRISHA, DAVID A
LAMB, RAYMOND S
LARA, MARY
LEEPER, CAYLIE J
LEUNG, YU K
LINDGREN, JACOB
LONG, JAMES L
LYNCH, EILEEN T
LYNCH, STEPHEN R
MALACA, DYAN C
MARQUEZ, ELIZABETH A
MARTINDALE, MARY L
MARTINEZ, MELYSSA
MASSEY, BARRON R
MAYBERRY, RORY M
MCGRANAHAN, GARY J
MEISENHEIMER, KIMBERLEY A
MILLER, SUSAN L
MILLING, WENDY F
MITHCHELL, NICOLE L
MIZE, JOLENE
MOELLER, NICOLE
MOHR, JEREMIAH T

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2014 (Cont'd)

1000
MOON, JORDAN E
MOORE, SCOTT E
MORENO, MIKE L
MORGAN, MADRINA L
MOYE, EDDIE L
MUERILLO, GERALDO
MURILLO, JORGE
MURPHY, BRITTANY
MURRY, MICHAEL A
NEWSOM, TOM H
NEWTH, KAILA
NIELSEN, WILLIAM A
NOBLES, AMBER
OAKWOOD HOUSING
OLSON, CLAUDIA C
OROZCO, RAUL M
OWEN, DELORES O
PADREGANDA, ANGEL
PAINE, JOHN H
PARCEL, JASON D
PASTOR, EVANGILYN
PATRICK, CHELSEA
PATTERSON, PAMELA R
PEASE, TIMOTHY M
PELAYO, ROSA E
PEREGRINA, JACQUELINE M
PERKINS, ROBERT
PINO, AMY
PISANI, BRIAN A
POVIO, VILMA
RAMAKRISHNA, ARUNA
RAMOS, CATHY M
REPPOND, STEVE
RILEY, AUBRIE T
RIVER OAKS APARTMENTS
ROBINSON, VIVIEN
ROBISON, KATHY
ROTH, HARRISON
RUFF, TRACEY S
SAIYAD, ABDUL N
SALLOT, KATHY
SALVATORE, LOUIS M
SAMIMI, ROYA
SAMUELS, DWAYNE N
SAYAXANG, LYSUNSHINE
SCHWERDT, COREY N
SEELAPASAY, CHRISTINA
SIMONS, BRANDON
SINCLAIR, DELIA A
SMITH, TONI

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2014 (Cont'd)

1000	SOLORZANO, JORGE A
	SPURLING, PAUL
	STEVENSON, SCOTT
	STITTS, TWYLA
	SWEAT, KEITH N
	TAN, CYNTHIA S
	TEE, LEE
	TERRY, THOMAS J
	THORNE, CRYSTAL M
	TOTTEN, SPENCER B
	TROWBRI, JOHN
	VANCE, ROSALIND K
	VARGAS, SIGIFREDO
	VASQUEZ, LORI R
	WAHAB, JAVED F
	WEEKS, LANDON
	WILLAIMS, BRENDA L
	WILLIAMS, DEWESELY
	WILLIAMSON, THOMAS P
	WILSON, MICHELLE A
	WINTON, ADRIENNE
	WISE, CARL M
	WOLFGANG, STEPHANIE
	WOULMS, NICHOLAS T

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Target Street	Cross Street	Source
✓	-	Cole Information

BROWNS VALLEY PKWY 2014

100	NATIONS GIANT HAMBURGERS
102	CROWN REALTY PROPERTY MANAGEMENT
104	ANDY PIGNATARO STATE FARM INSURANC
	STATE FARM INSURANCE
120	WELLS FARGO
	WELLS FARGO BANK
128	BED BATH & BEYOND
130	NUGGET MARKETS
132	YOGURT BEACH SHACK
140	ROUND TABLE PIZZA
144	VACAVILLE CLEANERS
146	PARKER LIQUOR
148	HAWAII NAILS & SPA
152	GREAT CLIPS
154	SAVERS
155	CENTRAL SOLANO USBC
	STARS RECREATION CENTER

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2010

1000 ALLEN, PATRICK K
AMBRIZ, JULIE L
ANDRADE, RODOLFO G
ATKINS, KEVIN L
AVILEZ-JR, ROBERT
BAILEY, MARK E
BANKS, CHRIS
BARTLE, JOSEPH M
BELANGER, CATHERINE L
BLUM, MICHAEL
BOYER, ERIC S
BRACY, HENRY L
BRINEY, CAITLYN
BROWN, TERON
BRUNER, JEREMY A
BURNS, NICHOLAS
CALGON CARBON CORP
CAMPANA, EDDIE P
CAMPBELL, CHRISTOPHER R
CARR, JEREMY
CARROLL, SEAN
CAVANAH, BRENT T
CEGUERRA, MARCIA L
CLEVETTE, MATTHEW
CRAIG, AILETHIA
CRANE, LONNY E
DAMITZ, LAURENCE A
DANIEL, RICHARD G
DAVIS, CHRISTINA
DE, JOSEPH
DENNIS, DAVID
DIVECCHIA, A
DORCH, TIFFANI M
DULA, SUZANNE
DUMLAO, MARY
DUNAGAN, STEPHANIE L
EILER, KENT A
ELMER, JESSICA L
FERRUOLO, VICTOR D
FIEHLER, ANASTASIA
FONSECA, JOSE
FOWLER, ASHLEY N
FREDERICK, JOSHUA W
FREEMAN, RYAN A
FULLER, DAVID
GANTNER, DREW S
GARBETT, STEVEN L
GARCIA, LINDA
GARRETT, DEMETRIUS
GASPAR, DAVID E

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2010 (Cont'd)

1000
GREGORY, BILL S
GRIFFIN, ELISE D
GUERRERO, LAURA
GUEVARA, ALYSIA
HARRINGTON, NICHELLE T
HASZ, GREGORY L
HEITZLER, KEIZE
HENRY, TRISHA
HILARIO, EDWIN C
HOFMAN, RADOMIR
HUFF, SUMER N
JACKSON, ROBIN E
JENTZSCH, SHELDON I
JOHNSON, ROBERT M
JONES, AMY M
JORDAN, MATTHEW
KEIL, ALFONS S
KELLER, CHRISTINE L
KELLING, CINDY
KLEIN, RICHARD L
LARGENT, L
LEE, ALEX J
LEGACY CONSULTANTS
LEHMAN, MARTIN
LIPPS, ALYSSA
LOCKE, WILLIAM R
LYNCH, MICHAEL
LYON, L
LYONS, MICHAEL L
MALANOWSKI, SEAN
MALINE, SEAN
MARIN, ROMAN P
MARTINEZ, CRISTINE
MARTINEZ, GENA
MATTHEWS, AUBREY H
MAXIMEISE PRODUCTIONS
MAY, B
MCCABE, JAMES A
MCCASKILL, CRYSTAL Y
MCLENDON, DANNION D
MCMANNON, MARK B
MCMUTRIE, BRANDON
MENDEZ, DANIEL
MILLER, NATHAN W
MINTER, SAMUEL
MORALES, KAREN
MORGENSTERN, MARK B
MORTEO, AUTUMN
MULHOLLAND, SHAW
NATHAN, KNIGHTEN

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Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2010 (Cont'd)

1000
NEFF, ANEISA N
NEWSOM, TOM H
ORQUID, SUSANE
PAOLETTI, DEBBIE
PELAYO, ROSA
PETERS, KRISTINA
PINHEIRO, THERESIA
POWELL, ALICIA
PRIBYL, MIKE
PROTHEROE, MICHAEL P
RAGLAND, SUSAN
RAMCZYK, STEPHANIE
REID, TORY
REYES, CARLOS
RIBERA, KELLI
RIGGS, KIURA
RIVER OAK APARTMENTS
ROBERTSON, ROBBIN
ROMERO, DAVID A
ROSADO, RICKY J
RUBIO, JANICE
RUIZ, VIKTORIA
SAMUELS, SAMMANTHA
SANCHEZ, JUVENAL F
SCHUETZ, JONI
SHARPE, PAMELA R
SMITH, LANCE O
SMITH, TONI
STEINBACHER, JOHN A
STEWART, KELLY
SWANK, CATHY
TAGAMA, EDWARD
TAKACS, BRIAN
TAMKERSLEY, LISA
TAYLOR, JESSICA
TEETS, RAQUEL C
TERYL, THOMAS
THORNE, CRYSTAL M
TIJERO, ROSA E
TIMOTHY, SWANK
TISDALE, DERICK
TOBIN, SEAN
TOBOLA, BEVENCIA
TOLIVER, JUDITH S
TOTTEN, SPENCER B
TROPEANO, PIERO N
TU, VI I
UNDEN, BRANDIE L
VERASTEGUI, CATHRYN D
VIMTRUP, PATRICIA A

DRAFT

Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2010 (Cont'd)

1000 WAYNE, RANDALL T
WHITTINGHAM, CINDY I
WILLIAM, SCOTT
WILLIFORD, SUZETTE

1001 VACAVILLE CITY BUSCITY COACH
VACAVILLE RECYCLING INFO
VACAVILLE STREETLIGHT OUTAGES

DRAFT

Target Street	Cross Street	Source
✓	-	Cole Information

BROWNS VALLEY PKWY 2010

100	NATIONS GIANT HAMBURGERS
104	STATE FARM INSURANCE
120	WELLS FARGO BANK
128	BED BATH & BEYOND
130	CVS PHARMACY
	NUGGET MARKETS
140	ROUND TABLE PIZZA
144	VACAVILLE CLEANERS
146	PARKWAY FOOD & LIQUOR
148	MI MIS NAILS
152	GREAT CLIPS
155	CENTRAL SOLANO USBC
	CITY SPORTS BAR & GRILL
	QZAR
	STARS RECREATION CTR

DRAFT

Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2005

1000
ADAMS, BRIAN
ADAMS, RODNEY A
ALLEN, PATRICK K
AMADOR, STEPHANIE J
ANDRIEU, PAMELA K
BAILEY, MARK E
BAINES, PHYLLIS E
BAKER, DONALD L
BARTLE, JOSEPH M
BARTON, DON M
BECK, ROBERT L
BELL, KATHLEEN A
BEVINGTON, SHERRIE
BLAIR, BEN M
BLAKE, CYNTHIA R
BLOOM, FREDERICK
BOGDA, JEFFREY A
BRIDGEFORTH, KEVIN
BROSS, SHANNON R
BURNS, MAUREEN T
CAMBRIDGE, M E
CAMPBELL, CHRISTOPHER R
CANTRELL, WILLIAM
CARRILLO, WENDY J
CARTER, BLAKE
CASHMAN, JOSEPH M
CASTILLO, ANTHONY
CHANEY, NATTASIA D
CLARKE-MASHATT, KENYETTA
COLAO, KRISTINA D
COMPTON, BARBARA R
COOKE, ROBERT
COOPER, KELLY S
COPPENS, SEAN
CORNICO, OLIVIA
COUCH, DONALD
CRANFORD, SEAN
DAVENPORT, KRISTIN M
DAVIS, FRANK
DAVY, ANGELA
DAWSON, JAMES W
DAY, LYDIA D
DEAL, ANGELA
DELARROYO, DANIEL B
DIEHL, STEVE C
DIPROFIO, ANTHONY M
DOVELMAN, J
DUNBAR, DAVID J
EDE, PETER
ELDREDGE, CASEY M

DRAFT

Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2005 (Cont'd)

1000 ELLIS, DAVID
FAENZI REMODEL & REPAIR
FREEMAN, RYAN A
FULLER, CRYSTAL
GALLUPS, EDWARD
GAMACHE, CHRISTOPHER
GARCIA, A
GAWEL, CARY J
GIGLIO, RICHARD J
GLASS, MARVIN J
GLOVER, KARONICA
GRAESSLE, M
HARDING, KEVIN D
HARMS, DAVID
HARVEY, JASON
HENDERSON, MATTHEW M
HENRY, EMILIE L
HICKS, WAYNE
HILARIO, EDWIN C
HOLIDAY-BANKS, AISHA
HORSENS, ALLEN
IFUNE, ERIC
ISAS, ANDREW
JACINTO, JOEL F
JANOVITZ, TONI
JENNY, PATRICK L
JIMERSON, NICOLE Y
JOE, JILL L
JOHNSON, MEGHAN D
JOHNSON, ROBERT M
JUNIOR, KEITH L
KALAVERAS, WALTER
KAPOOR, AJAY
KELLEHER, MATTHEW K
KELLING, JAIME
KELLY, SEAN M
KENNY, JULIANA E
KEVIN, ARIAS
KIEFFER, MICHAEL
KIMBRELL, JOE T
KINCAID, JUDITH A
KLEIN, RICHARD L
KRYSTEK, KUMAR
LANE, BETTY L
LANTING, KENNETH
LARGOZA, EVA
LAUDERBACK, CHRIS B
LAWRENCE, VICTORIA E
LEE, JEFFREY
LEGACY CONSULTANTS

DRAFT

Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2005 (Cont'd)

1000
LINDSAY, LISA M
LOCKE, WILLIAM R
LOPEZ, SUSAN
LUTTENBERGER, MARK
MARIE, SUSAN
MCCANN, DONALD A
MCCORD, MICHEAL
MCDANIEL, JERRY W
MCDONALD, SANDRA J
MELCHOIR, JESSICA
MILLER, ROBERT D
MOORE, TONI
MORENO, LISA
MOTSINGER, GARY
MTEUZI, HASHIM
MULLIGAN, MICHAEL P
MUTSCHLER, TROY
NADERI, FARHANG A
NARDELLA, ROD
NAVARRE, JEREMY
NELSON, DAVID
NICKEL, MARVIN M
NIEU, HAU V
NIEVES, RAQUEL N
NUDO, RAYMOND
OHARA, TIM E
OHTSU, AKIKO
PARSONS, TARA
PATTERSON, THERESE M
PELLEGRINO, PETER
PERKINS, L
PERRON, DAN
PETE, HERBERT D
PETERSON, DANIEL J
PINKERTON, PATRICIA E
POLLASTRINI, BETH
POWELL, ALICIA
POWER, YVONNE V
PROCTOR, ROBIN
PRODEN, JON
PROKA, GUSTAV
RABOT, DANIEL W
RAMOS, CATHY M
REIDSEMA, MICHELLE
REISS, JOHN A
REYES, MARK A
RICHARDSON, DARRYL K
RIVER OAKS APARTMENTS
ROARK, MICHAEL J
ROBISON, TIMOTHY

DRAFT

Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2005 (Cont'd)

1000
ROUSE, ZACHERY T
RUBIO, JANICE
SCHULTZ, TINA M
SCZEPANSKI, DENNIS V
SEGOVIA, DAVID I
SIBUG, JONATHAN M
SIEBERT, GREGOR G
SILVESTRE, MICHAEL J
SMITH, NANCY J
STAUKOV, ALEXANDER S
STOKELY, DAN R
STONE, MEREDITH L
SWANK, CATHY
SWETT, WINFRED L
TAGGART, JAMES R
TATE, LEN J
TERESI, STEPHANIE
TERRONEZ, FRANK A
TERYL, THOMAS
THORNE, CRYSTAL
TOLIVER, JUDITH
TOTTEN, SPENCER B
TOY, HEATHER
TREADWAY, SUSAN
TURNER, DEBBIE
UBER, KRISTOPHER
UMBARGER, CHERI A
UNDERWOOD, BENJAMIN L
VACAVILLE EXPRESS
VENEZIO, JEREMY
VIDA, DHELL
VOLKHARDT, RODNEY
WANOUS, KRISTINA
WATSON, NIKKOLE M
WATTS, FRANKLIN
WEAVER, DAWN
WEBB, ELUM
WHITAKER, ANNE L
WHITE, SARA E
WHITE, ZACHARY K
WILKINSON, P
WILLETT, DAVID P
WILLIAMS, L M
WILSON, HAROLD
WINEGAR, J B
WING, DENNIS N
YARBER, JULIAN B
YODER, SHANE
YOUNG, CREED
YOUNG, TIMOTHY C

DRAFT

Target Street	Cross Street	Source
-	✓	Cole Information

ALLISON DR 2005 (Cont'd)

1000 ZARBO, SCOTT
ZIRZOW, CURT W
1001 COACH USA TRANSIT SERVICE
FIRST TRANSIT INC

DRAFT

Target Street	Cross Street	Source
✓	-	Cole Information

BROWNS VALLEY PKWY 2005

102	VERIZON COMMUNICATIONS
104	ROBERSON SAMUEL G SR CPCU
	SAM ROBERSON STATE FARM INSURANCE
	STATE FARM / SAMUEL G ROBERSON SR
126	WELLS FARGO BANK NA
128	BED BATH & BEYOND
130	NUGGET MARKET
132	CURVES FOR WOMEN
	DOLLAR SUPER STORE VACAVILLE
	PARTY SUPPLY & MORE
136	YEN KING RESTAURANT
140	ROUND TABLE PIZZA
144	BROWNS VALLEY CLEANERS
146	PARKWAY FOOD & LIQUOR
148	AL THINGS BEAUTY
	ALL THINGS BEAUTY
154	YARDBIRDS HOME CENTER
155	KPS PROSHOP
	Q ZAR
	STARS RECREATION & BOWLING CENTER
	THE GOLDEN HILLS MUSTANG CLUB

DRAFT

Target Street	Cross Street	Source
✓	-	Cole Information

BROWNS VALLEY PKWY 2000

100	NATIONS GIANT HAMBURGERS & GREAT PIES
102	GTE WIRELESS
104	STATE FARM INS
	TAYLOR CHRISTINE
126	GREAT CREPE COFFEE HOUSE & CAFE INCORPORATED
	POST TOOL
136	OCCUPANT UNKNOWN,
	YEN KING RESTAURANT
140	ROUND TABLE PIZZA
144	BROWNS VALLEY CLEANERS
146	PARKWAY FOOD & LIQUOR
152	BECKER, LISA
	FRANKLIN, TRACY
154	YARDBIRDS HOME CENTER
155	STARS RECREATION & BOWLING CENTER

DRAFT

Target Street	Cross Street	Source
✓	-	Cole Information

BROWNS VALLEY PKY 1995

100	NATIONS GIANT HAMBURGERS
102	PACKAGING STORE HANDLE WITH CR
120	RAINBOW RECORDS
126	LA SHELLS DONUTS
130	K MART
132	LESLIES SWIMMING POOL SUPPLY
136	YEN KING RESTAURANT
140	ROUND TABLE PIZZA
144	JIM DANDY DRY CLEANERS
146	PARKWAY FOOD & LIQUOR
148	FLOORS TO GO
154	YARDBIRDS ELECTRIC & PLUMBING

DRAFT

Target Street	Cross Street	Source
✓	-	Cole Information

BROWNS VALLEY PKY 1992

100	NATIONS HMBRGRS&PIE
102	PACKAGING STORE
120	RAINBOW RECORDS
130	K MART STORE 7591
132	LESLIES POOL SUPPLY
136	YEN KING RESTAURANT
140	ROUND TABLE PIZZA
144	JIM DANDY DRY CLNRS
146	PARKWAY FOOD&LIQUOR
148	FLOORS TO GO
154	YARDBIRDS ELEC&PLBG

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Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688

Inquiry Number: 7593477.4
March 12, 2024

EDR Historical Topo Map Report
with QuadMatch™

DRAFT

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

03/12/24

Site Name:

Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688
EDR Inquiry # 7593477.4

Client Name:

Kleinfelder, Inc.
24411 Ridge Rte Dr Suite 225
Laguna Hills, CA 92653
Contact: Stefan Birardi

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Kleinfelder, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA
Project: 24005105.001A

Coordinates:

Latitude:	38.379074 38° 22' 45" North
Longitude:	-121.970177 -121° 58' 13" West
UTM Zone:	Zone 10 North
UTM X Meters:	589949.43
UTM Y Meters:	4248377.34
Elevation:	127.00' above sea level

Maps Provided:

2022	1917
2018	1908
2015	
2012	
1978, 1980	
1973	
1968	
1953	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2022 Source Sheets



Allendale
2022
7.5-minute, 24000



Elmira
2022
7.5-minute, 24000

2018 Source Sheets



Allendale
2018
7.5-minute, 24000



Elmira
2018
7.5-minute, 24000

2015 Source Sheets



Allendale
2015
7.5-minute, 24000



Elmira
2015
7.5-minute, 24000

2012 Source Sheets



Allendale
2012
7.5-minute, 24000



Elmira
2012
7.5-minute, 24000

DRAFT

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1978, 1980 Source Sheets



Allendale
1978
7.5-minute, 24000
Aerial Photo Revised 1949



Elmira
1980
7.5-minute, 24000
Aerial Photo Revised 1978

1973 Source Sheets



Elmira
1973
7.5-minute, 24000
Aerial Photo Revised 1973

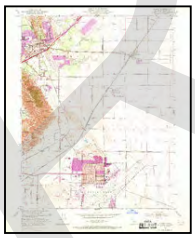


Allendale
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1968 Source Sheets

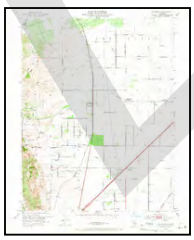


Allendale
1968
7.5-minute, 24000
Aerial Photo Revised 1968



Elmira
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1953 Source Sheets



Allendale
1953
7.5-minute, 24000
Aerial Photo Revised 1949



Elmira
1953
7.5-minute, 24000
Aerial Photo Revised 1949

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1917 Source Sheets



Elmira
1917
7.5-minute, 31680



Wolfskill
1917
7.5-minute, 31680

1908 Source Sheets

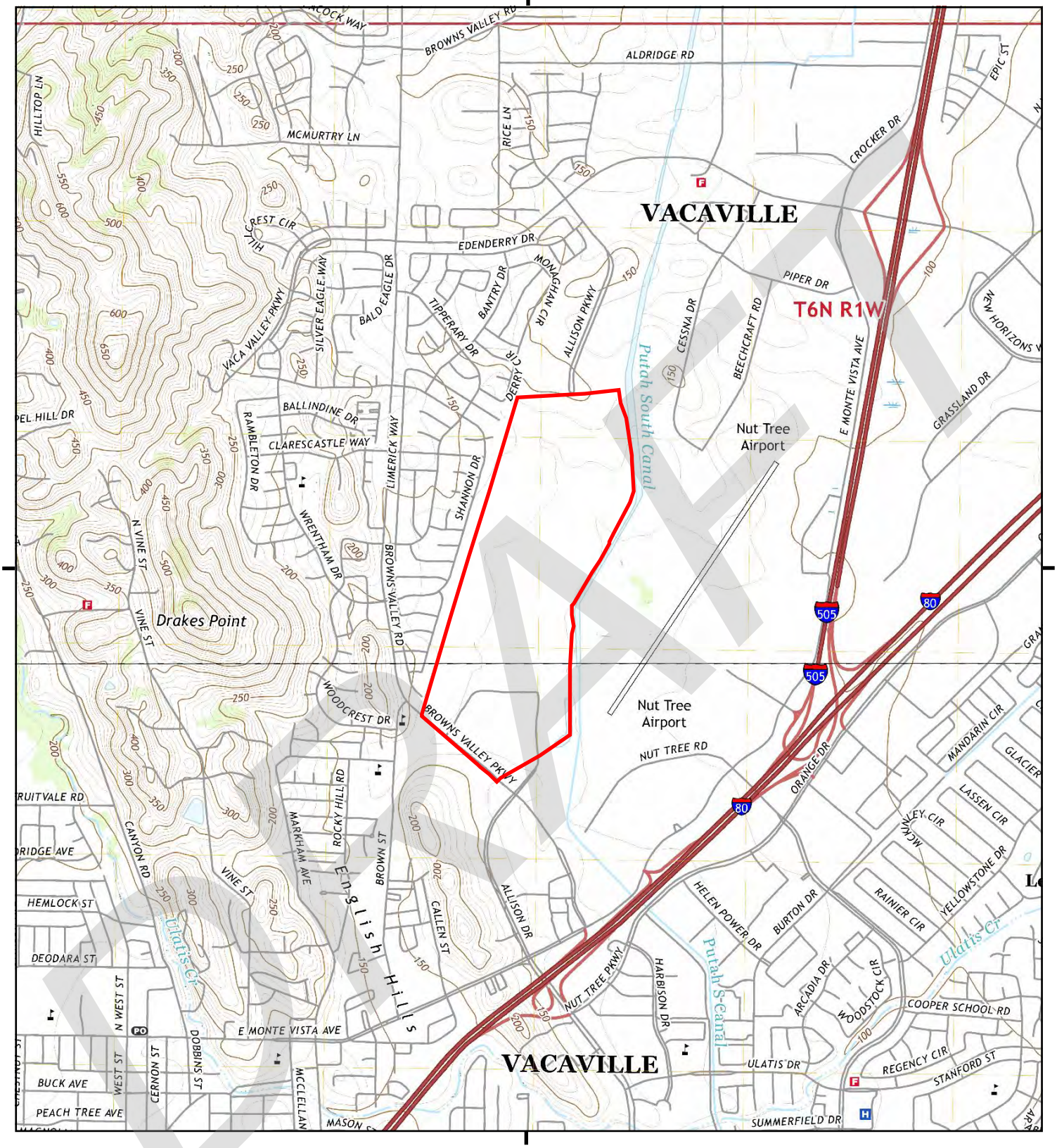


Vacaville
1908
15-minute, 62500

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Historical Topo Map

2022



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

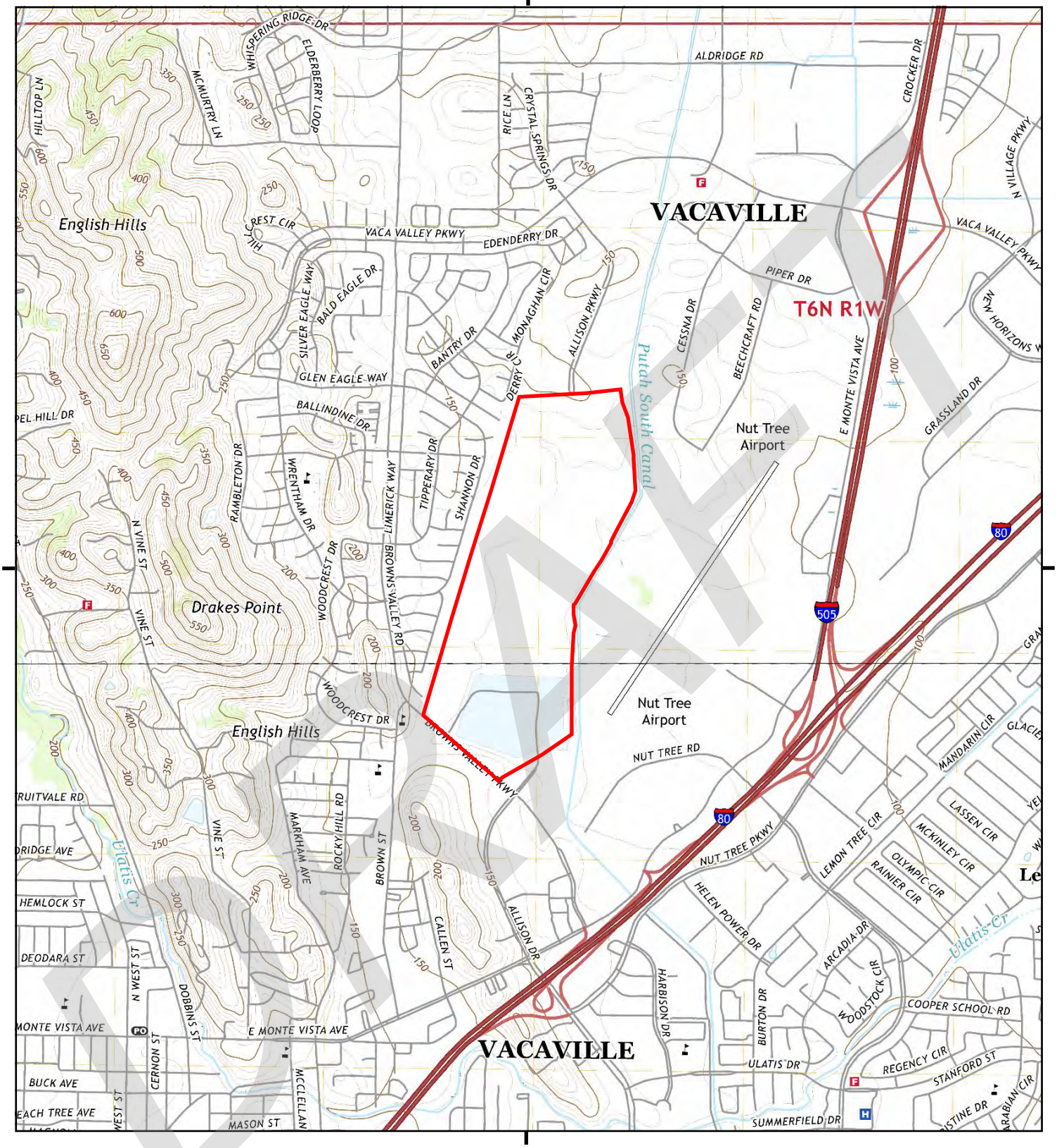
TP, Allendale, 2022, 7.5-minute
S, Elmira, 2022, 7.5-minute

SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

2018



This report includes information from the following map sheet(s).

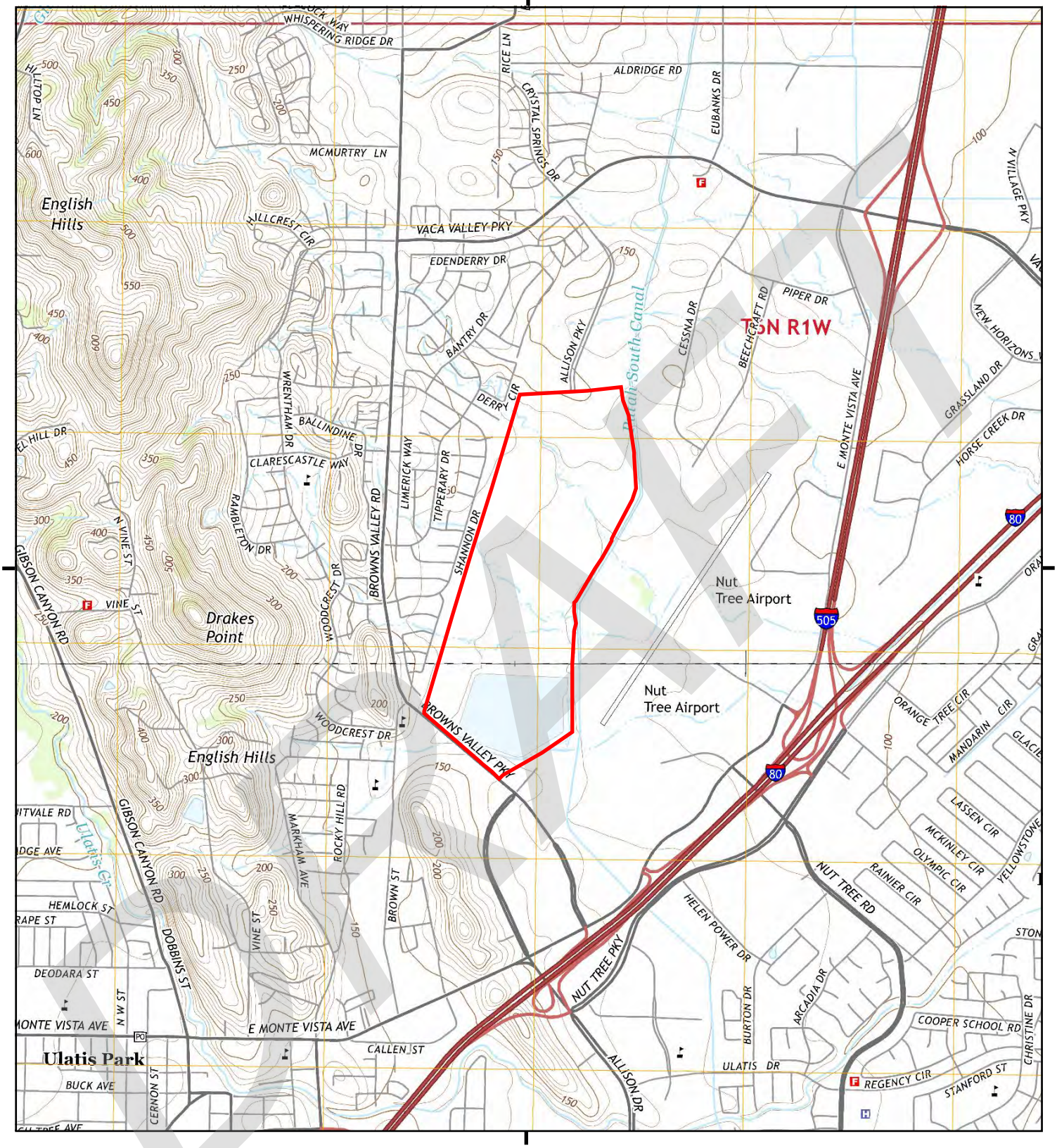
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Allendale, 2018, 7.5-minute
S, Elmira, 2018, 7.5-minute

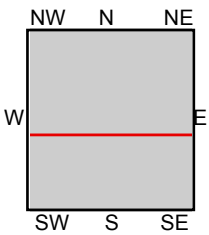
SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.

N



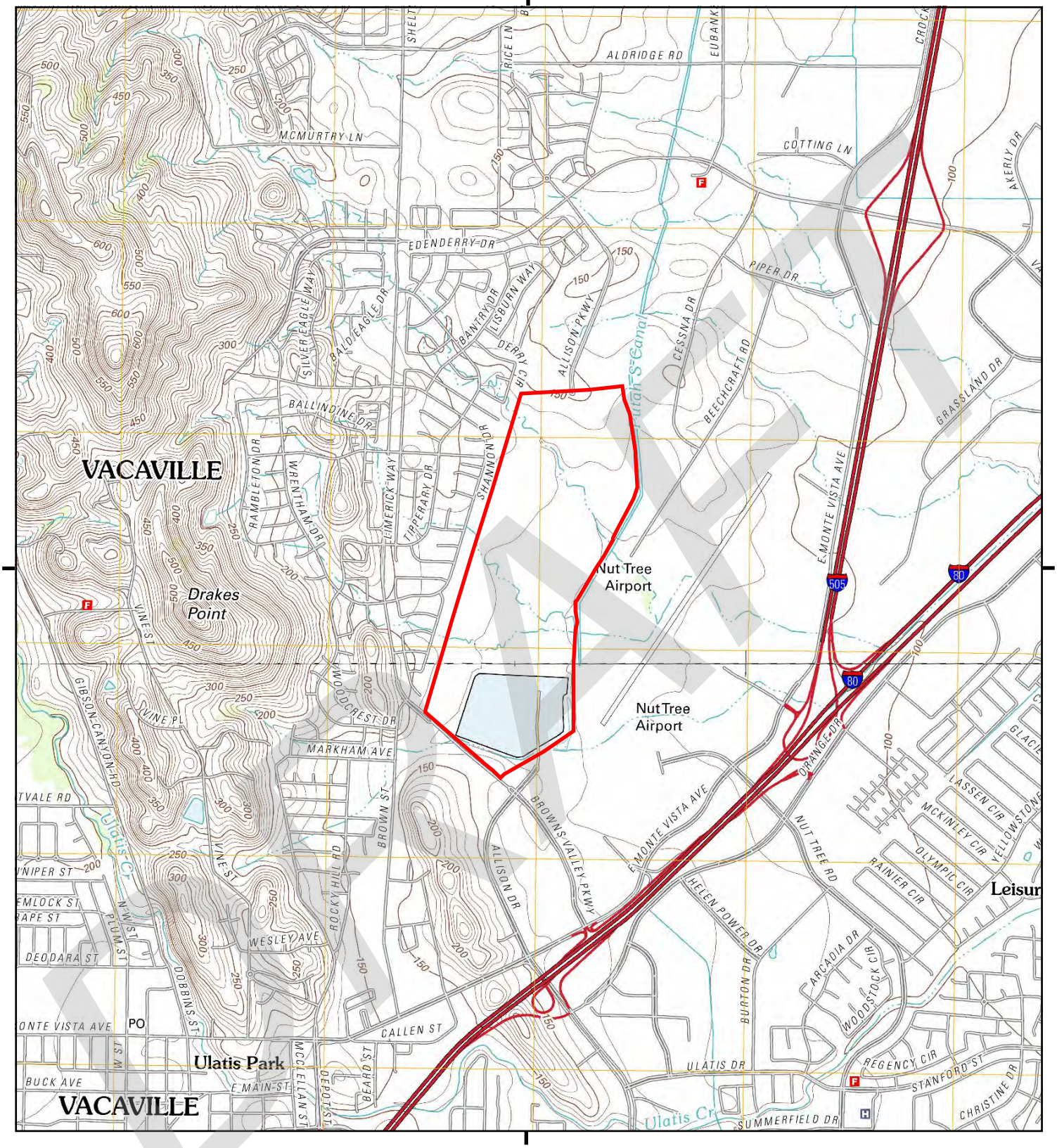
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0 Miles 0.25 0.5 1 1.5



TP, Allendale, 2015, 7.5-minute
S, Elmira, 2015, 7.5-minute

SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.



This report includes information from the following map sheet(s).

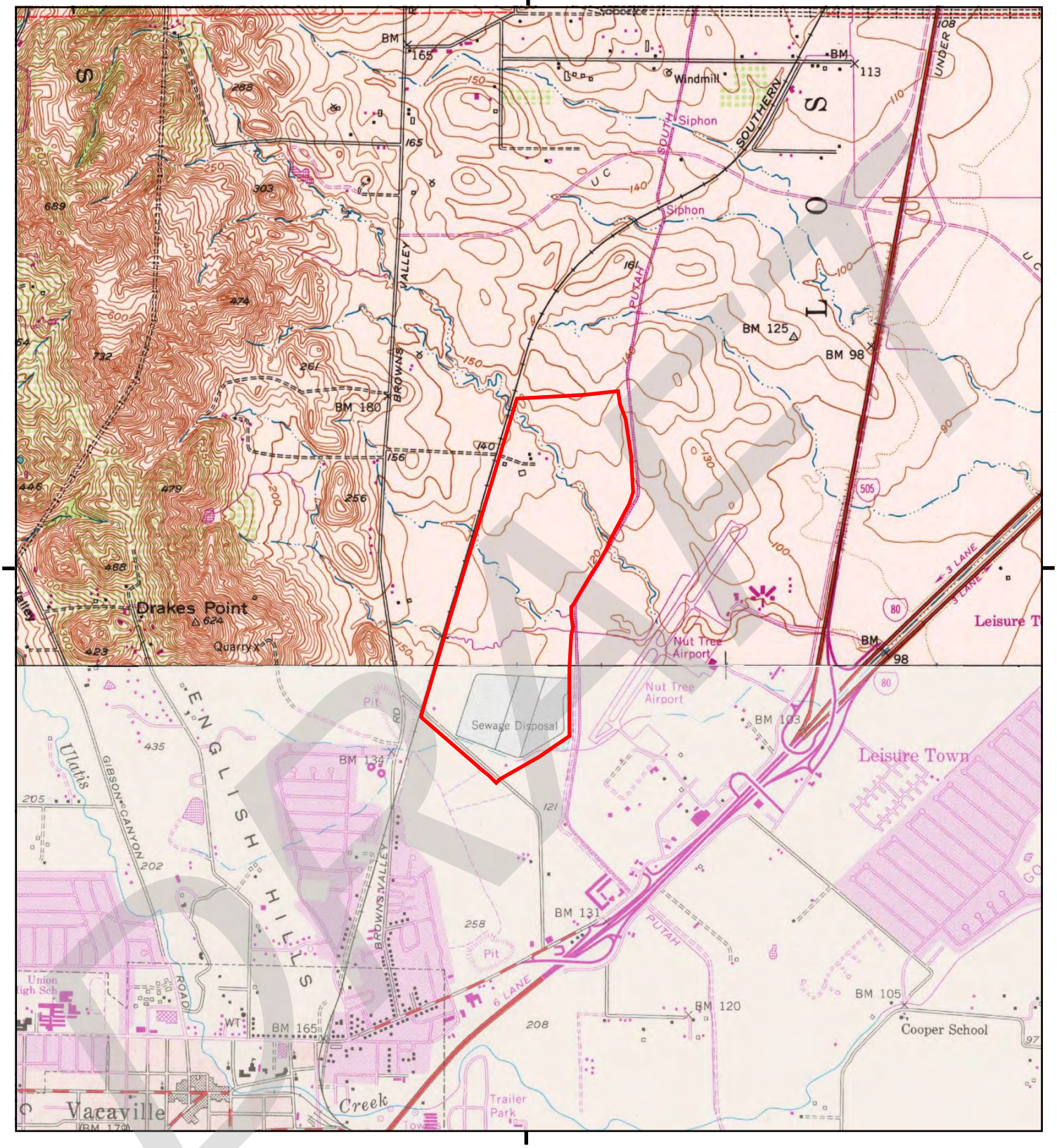
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Allendale, 2012, 7.5-minute
S, Elmira, 2012, 7.5-minute

SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

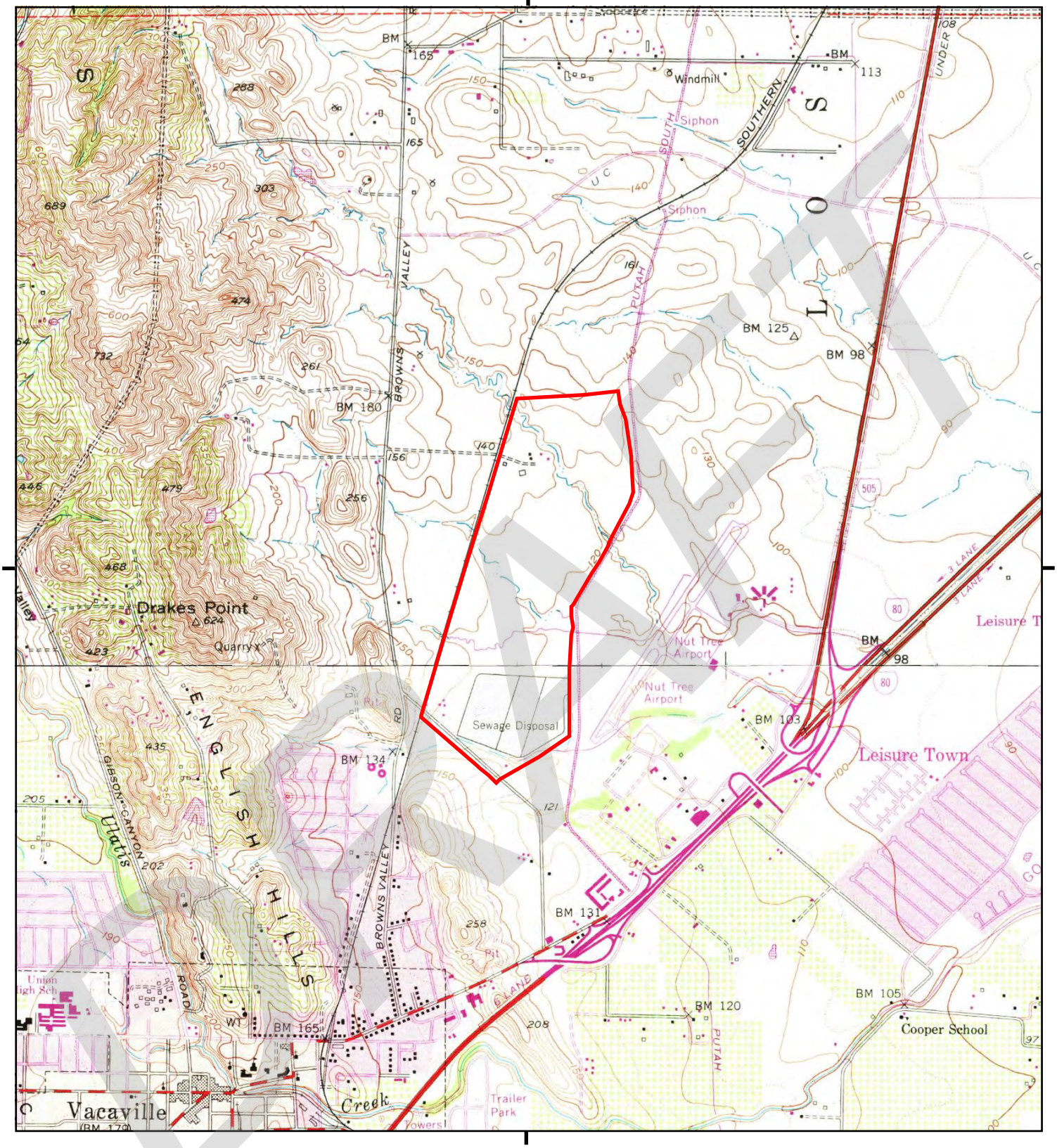
TP, Allendale, 1978, 7.5-minute
S, Elmira, 1980, 7.5-minute

SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

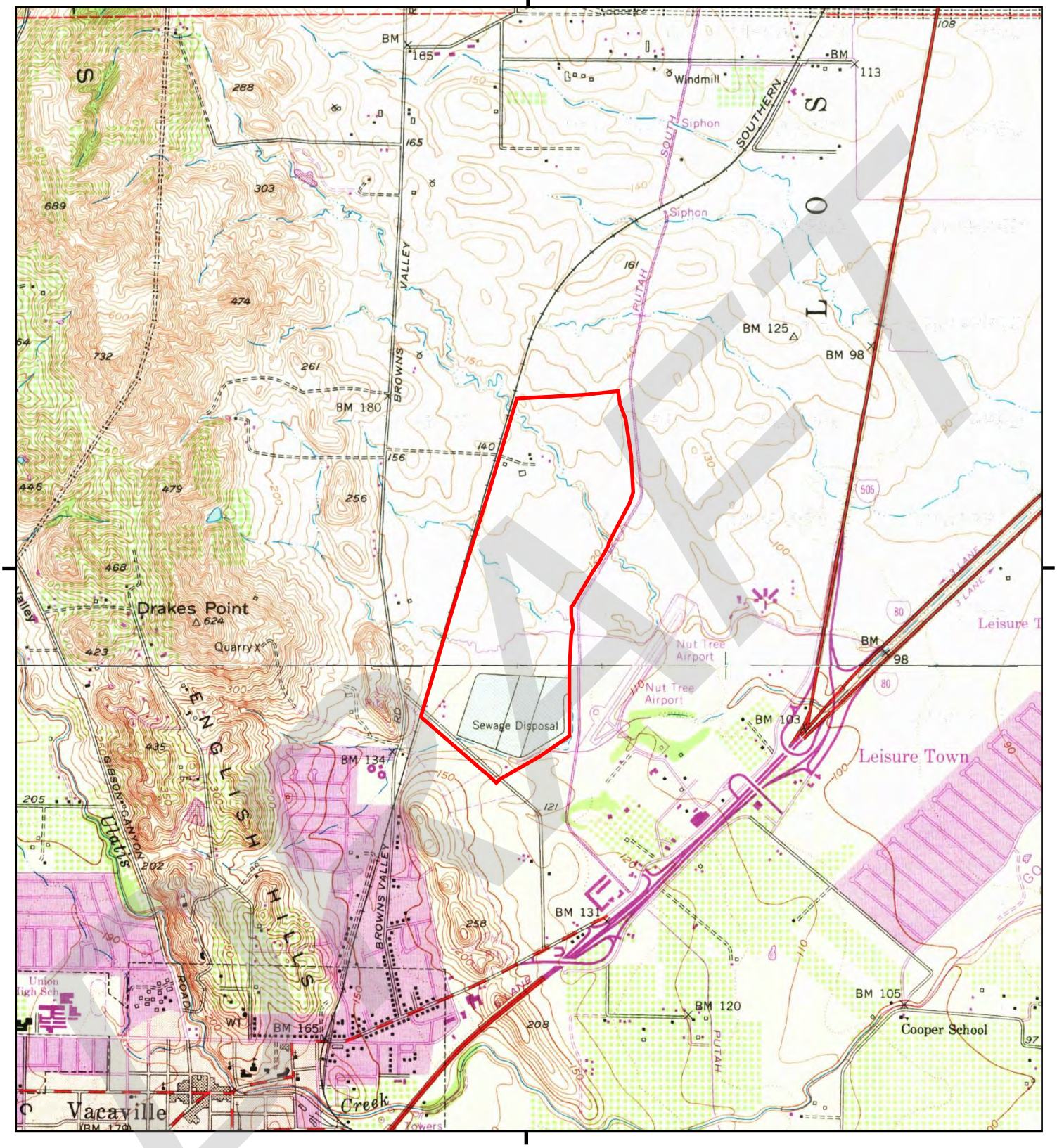
TP, Allendale, 1973, 7.5-minute
S, Elmira, 1973, 7.5-minute

SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1968



This report includes information from the following map sheet(s).

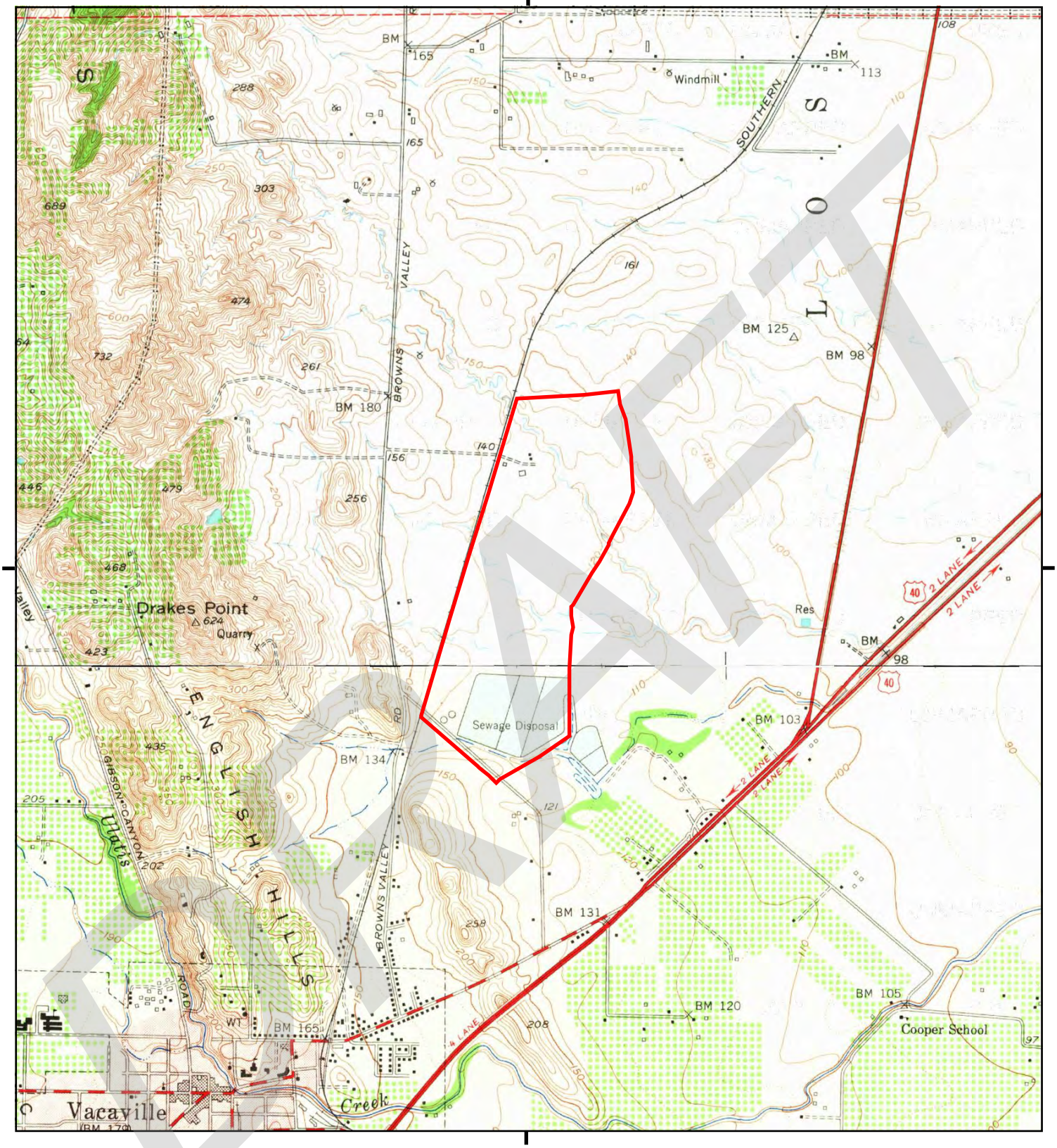
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Allendale, 1968, 7.5-minute
S, Elmira, 1968, 7.5-minute

SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.

N



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This report includes information from the following map sheet(s).

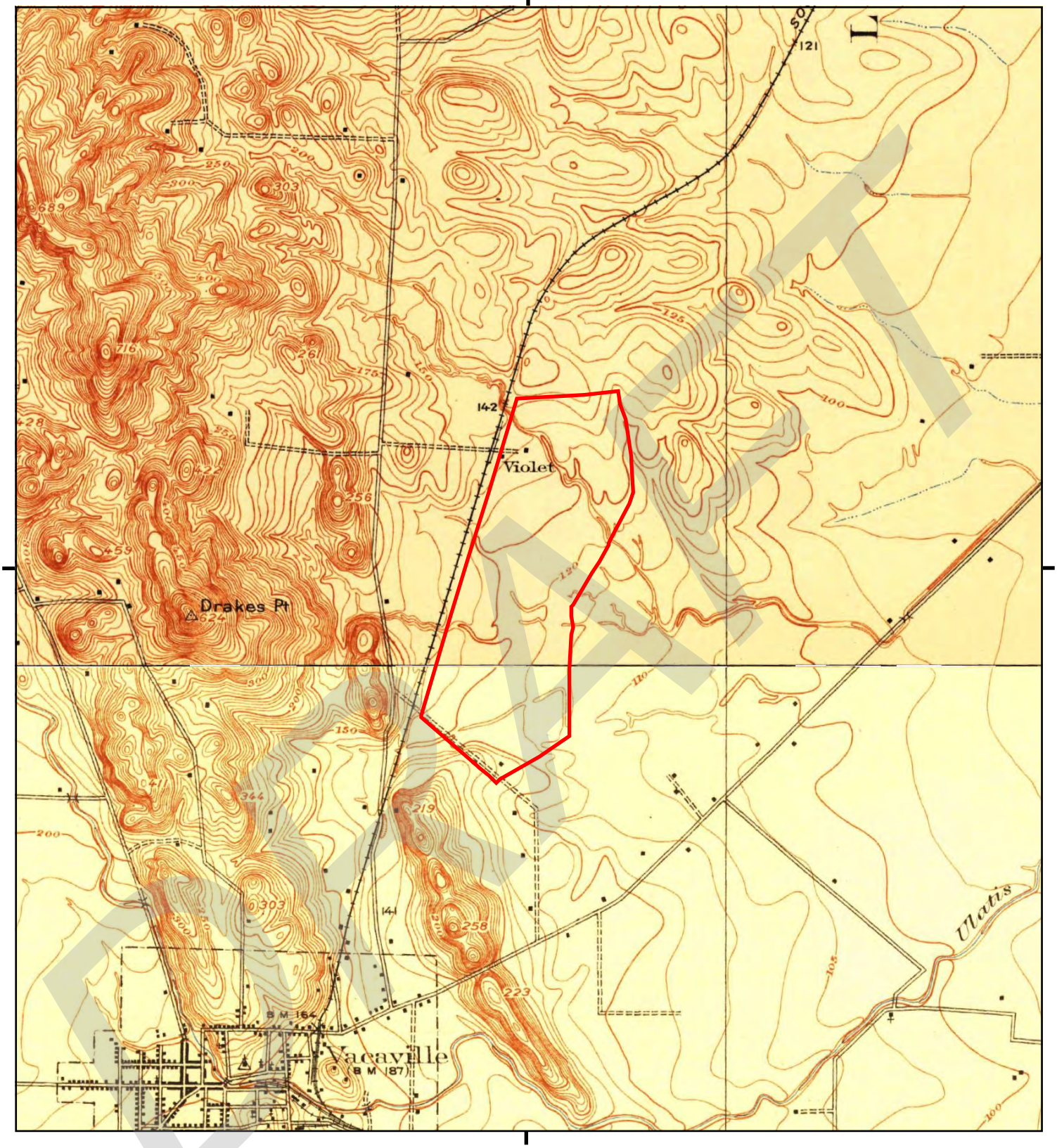
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Allendale, 1953, 7.5-minute
S, Elmira, 1953, 7.5-minute

SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.

N



This report includes information from the following map sheet(s).

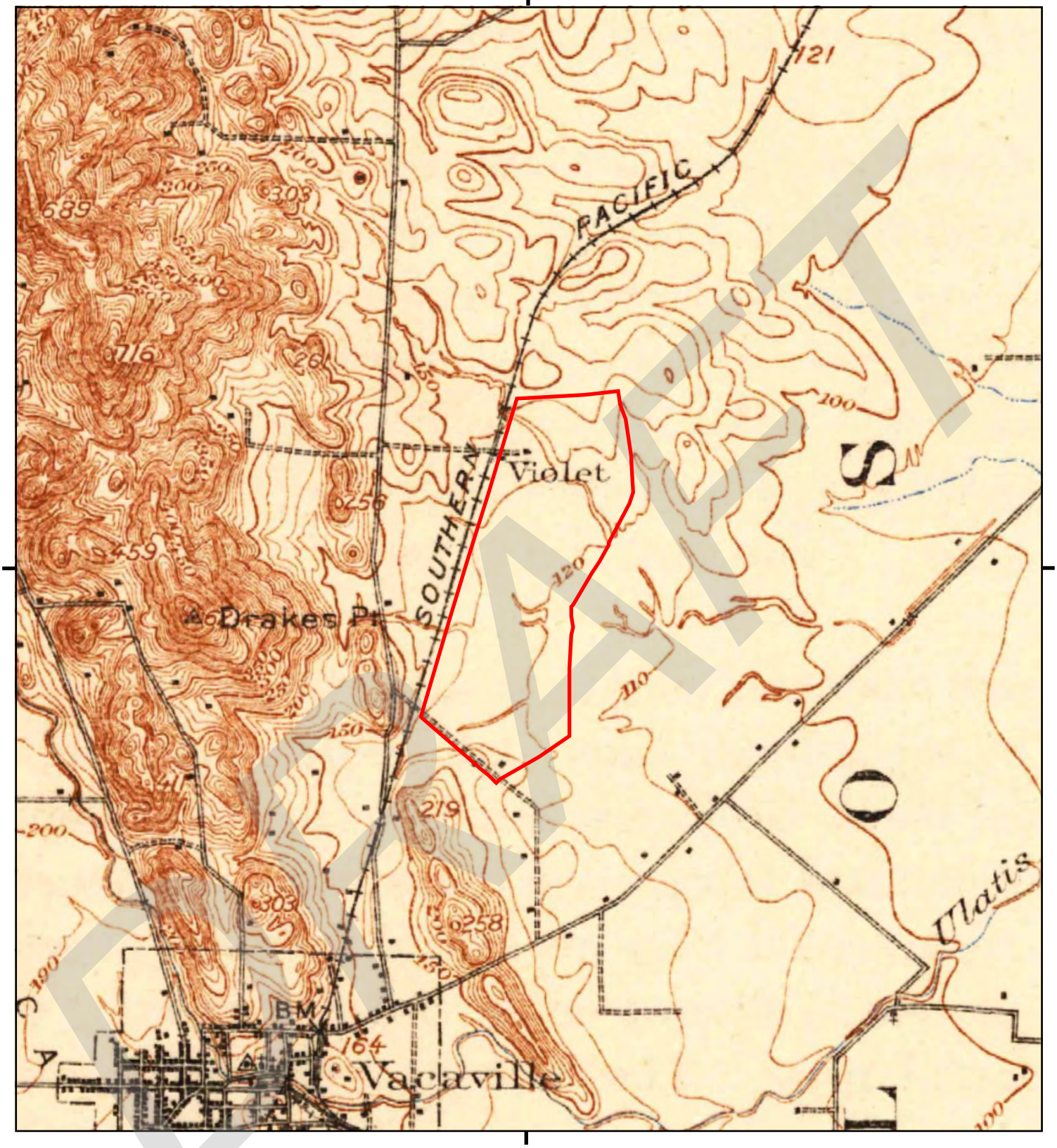
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Wolfskill, 1917, 7.5-minute
S, Elmira, 1917, 7.5-minute

SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.

N



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This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Vacaville, 1908, 15-minute

SITE NAME: Centennial Park
ADDRESS: 270 Browns Valley Parkway
Vacaville, CA 95688
CLIENT: Kleinfelder, Inc.

N

Centennial Park
270 Browns Valley Parkway
Vacaville, CA 95688

Inquiry Number: 7593477.8
March 12, 2024

EDR Building Permit Report

Target Property and Adjoining Properties

DRAFT

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Thank you for your business.
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with any questions or comments.

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

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EDR® Environmental Data Resources Inc

BUILD FAX PROPERTY HISTORY

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Kleinfelder, Inc. on Mar 12, 2024.

TARGET PROPERTY

270 Browns Valley Parkway
Vacaville, CA 95688

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **NO PERMITS IDENTIFIED**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Name: JurisdictionName
Years: Years
Source: Source
Phone: Phone

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BUILDING DEPARTMENT RECORDS SEARCHED

Name: Napa County Unincorporated Area
Years: 1960-2024
Source: County of Napa, Building and Development, NAPA, CA
Phone: (707) 253-4416

Name: Redding
Years: 1926-2024
Source: City of Redding, Development Services, Building Division, FAIRFIELD, CA
Phone: 530-225-4014

Name: Vacaville
Years: 1989-2024
Source: City of Vacaville, Building Permits, VACAVILLE, CA
Phone: (707) 449-5152

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TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

270 Browns Valley Parkway
Vacaville, CA 95688

No Permits Found

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ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

No Permits Found

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GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeymen:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

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GLOSSARY

Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use (s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: $1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

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Appendix G

Noise Modeling Outputs

Report date: 7/3/2024
Case Description: Centennial Park Grading

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Residential	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50	0
Grader	No	40	85		50	0
Scraper	No	40		83.6	50	0

Calculated (dBA)

Equipment		*Lmax	Leq
Dozer		81.7	77.7
Grader		85	81
Scraper		83.6	79.6
	Total	85	84.4

*Calculated Lmax is the Loudest value.

Centennial Park Event Pavilion Amplified Music Model

CadnaA Sound Levels Library Table

Name	ID	Type	1/3 Oktave Spectrum (dB)										
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin
Music Curve 1	MusicCur2	Lw		85.1	114.6	122	122.2	122.3	117.4	101.1	113.7	125.6	127.8

Centennial Park Event Pavilion Amplified Music Model

CadnaA Point Source Table

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)	(min)	(min)	(dB)	(Hz)		(m)		(m)	(m)	(m)
				106.2	106.2	106.2	Lw	MusicCur2		0	0	0			19.4				0		(none)	2.44	r	589741.94	4248196.49	42.44
				106.2	106.2	106.2	Lw	MusicCur2		0	0	0			19.4				0		(none)	2.44	r	589743.97	4248193.03	42.44
				106.2	106.2	106.2	Lw	MusicCur2		0	0	0			19.4				0		(none)	2.44	r	589756.43	4248206.24	42.44
				106.2	106.2	106.2	Lw	MusicCur2		0	0	0			19.4				0		(none)	2.44	r	589754.60	4248209.39	42.44

Centennial Park Event Pavilion Amplified Music Model

CadnaA Receiver Table - No Noise Barriers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(m)		(m)	(m)	(m)
				74.6	74.6	50	0				1.52	r	589748.91	4248222.65	41.5
				53.8	53.8	50	0				1.52	r	589610.14	4248305.31	44.4
				54.3	54.3	50	0				1.52	r	589584.94	4248219.82	43.5
				50.4	50.4	50	0				1.52	r	589648.11	4248426.80	43.5
				50.5	50.5	50	0				1.52	r	589541.76	4248074.19	43.9
				46.7	46.7	50	0				1.52	r	589502.81	4247945.49	44.5

588600
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591200
4249200
4249000
4248800
4248600
4248400
4248200
4248000
4247800
4247600
4247400
45
50
55
60
65
70
MASTER PLAN
CENTENNIAL PARK
HELIX