permit SONOMA

Proposed Mitigated Negative Declaration

Publication Date:	July 26, 2024
Public Review Period:	July 26, 2024 to August 26, 2024
State Clearinghouse Number:	2024071069
Permit Sonoma File Number:	PLP16-0054
Prepared by:	Hannah Spencer
Phone:	707-565-1928

Pursuant to Section 15071 of the State CEQA Guidelines, this proposed Mitigated Negative Declaration and the attached Initial Study, constitute the environmental review conducted by the County of Sonoma as lead agency for the proposed project described below:

Project Name:	Forestville Downtown Park
Project Applicant/Operator:	Forestville Planning Association
Project Location/Address:	6990 Front Street & 6720 Hwy 116, Forestville
APN:	083-270-001 & 083-270-002
General Plan Land Use Designation:	Limited Commercial (LC)
Zoning Designation:	PC (Planned Community), LG/116 (Local Area Guidelines/Highway 116), OAK (Oak Woodland), and SR (Scenic Resources)
Decision Making Body:	Planning Commission will make a recommendation on the project to the Sonoma County Sonoma County Board of Supervisors for a final decision.
Appeal Body:	NA
Project Description:	See Item III, below

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation" as indicated in the attached Initial Study and in the summary table below:

Table 1. Summary of Topic Areas

Topic Area	Abbreviation*	Yes	No
Aesthetics	VIS	X	
Agriculture & Forestry Resources	AG		X
Air Quality	AIR	X	
Biological Resources	BIO	X	
Cultural Resources	CUL	X	
Energy	ENERGY		X
Geology and Soils	GEO		X
Greenhouse Gas Emission	GHG		X
Hazards and Hazardous Materials	HAZ		X
Hydrology and Water Quality	HYDRO		X
Land Use and Planning	LU		X
Mineral Resources	MIN		X
Noise	NOISE	X	
Population and Housing	POP		X
Public Services	PS		X
Recreation	REC		X
Transportation	TRANS		X
Tribal Cultural Resources	TCR	X	
Utilities and Service Systems	UTL		X
Wildfire	FIRE		X
Mandatory Findings of Significance	MFS		X

RESPONSIBLE AND TRUSTEE AGENCIES

The following lists other public agencies whose approval is required for the project, or who have jurisdiction over resources potentially affected by the project.

Table 2 **Agency**	**Activity**	**Authorization**
Northern Sonoma County Air Pollution Control District (NSCAPCD)	Stationary air emissions	Emissions thresholds from BAAQMD Rules and Regulations (Regulation 2, Rule 1 – General Requirements; Regulation 2, Rule 2 – New Source Review; Regulation 9 – Rule 8 – NOx and CO from Stationary Internal Combustion Engines; and other BAAQMD administered Statewide Air Toxics Control Measures (ATCM) for stationary diesel engines

U.S. Army Corps of Engineers	Permits for activities that involve any discharge of dredged or fill material into "waters of the United States," including wetlands	Clean Water Act, Section 401
North Coast Regional Water Quality Control Board (NCRWQCB)	Water quality control basin plans; waste discharge requirements; water quality certification or waiver under Section 401 of the Clean Water Act	Porter-Cologne Water Quality Control Act
State Water Resources Control Board	Generating stormwater (construction, industrial, or municipal)	National Pollutant Discharge Elimination System (NPDES) requires submittal of NOI
California Department of Fish and Wildlife	Incidental take permit for listed plan and animal species; Lake or streambed alteration	California Endangered Species Act (CESA), Section 2081 of the Fish and Game Code; Section 1600 of the Fish and Game Code
U. S. Fish and Wildlife Service (FWS) and or National Marine Fisheries Service (NMFS)	Incidental take permit for listed plant and animal species	Endangered Species Act
California Department of Transportation (Caltrans)	Improvements along State Highway 116 within downtown Forestville.	California Department of Transportation authorities
Sonoma County Public Infrastructure	Traffic and road improvements	Sonoma County Municipal Code, Chapter 15
Sonoma County Agricultural Preservation and Open Space District	Improvements on the property	Conservation Easement and Recreation Covenant recorded under O.R. #2013-110043 and #2013-110044
Sonoma County Regional Parks	West County Trail	Sonoma County Municipal Code, Chapter 20
Forestville Water District	Water and sewer supply facilities	California Water Districts Principle Enabling Act, Water Code Sec. 34000
Sonoma County Environmental Health	Community Event and Retail Food Facility Permits	Sonoma County Municipal Code, Chapter 14

ENVIRONMENTAL FINDING:

Based on the evaluation in the attached Initial Study, I find that the project described above will not have a significant adverse impact on the environment, provided that the mitigation measures identified in the Initial Study are included as conditions of approval for the project and a Mitigated Negative Declaration is proposed. The applicant has agreed in writing to incorporate identified mitigation measure into the project plans.

Hannah Spencer — July 26, 2024

Prepared by: Hannah Spencer — Date:

Expanded Initial Study

I. INTRODUCTION:

Sonoma County Permit and Resource Management Department (Permit Sonoma) has prepared an Initial Study for an application for a Zone Change from PC (Planned Community) zoning district to the PF (Public Facilities) zoning district, General Plan Amendment from the LC (Limited Commercial) Land Use Designation to the PQP (Public and Quasi Public) Land Use Designation, and Use Permit and Design Review for a new public park to be completed in two phases. The project will provide urban open space with opportunities for public recreational amenities, operating from Sunrise to Sunset, 7 days per week.

This report is the Initial Study required by the California Environmental Quality Act (CEQA). The report was prepared by Hannah Spencer, Project Planner with the Sonoma County Permit and Resource Management Department, Project Review Division. Information on the project was provided by Forestville Planning Association. Technical studies were provided by qualified consultants to support the conclusions in this Expanded Initial Study. Technical studies, other reports, documents, and maps referred to in this document are available for review through the Project Planner, or the Permit and Resource Management Department (Permit Sonoma) Records Section.

Please contact the Project Planner, Hannah Spencer, at Hannah.Spencer@sonoma-county.org or (707) 565-1928 for more information.

II. EXISITNG FACILITY

The project is located in downtown Forestville, adjacent to Highway 116. The project site currently operates as an unimproved community park, gathering area for community events, and trailhead to the Sonoma County West County Trail. The site consists of a single legal parcel comprised of two Assessor Parcel Numbers (APN 083-270-001 & -002) and is encumbered by a Conservation Easement and Recreation Covenant held by Sonoma County Agricultural Preserve and Open Space District. Zoning for the property is PC (Planned Community) and combining zones for LG/116 (Local Area Guidelines/Highway 116) and SR (Scenic Resources).

A 1992 Minor Subdivision, File No. MNS87-426, created the project property and in 2016, Lot Line Adjustment File No. LLA15-0044 modified the property line boundaries to its current configuration.

In 2013, the Sonoma County Agricultural Preservation and Open Space District (District) granted Matching Grant Program funds to the Forestville Planning Association (FPA) for acquisition of the property. In exchange, FPA conveyed a Conservation Easement and Recreation Covenant to the District which currently limit the use of the property to natural resource preservation and public outdoor recreation (documents recorded O.R. #2013-110043 and #2013-110044). The Recreation Covenant compliments the Conservation Easement by assuring the continued and perpetual public outdoor recreational use of the property consistent with the Conservation Easement.

Over the years, FPA has operated the project property as an unimproved community park with picnic tables, gravel-parking area, park signs, natural resource preservation, and a gathering area for approximately 20 annual community events. Since 2019, the project site has also served as an official trailhead to the Sonoma County Regional Park's West County Bike Trail. Natural resource protection

activities occurring onsite include habitat preservation of oak woodland and savannah, annual grassland, riparian woodland and seasonal wetlands.

III. PROJECT DESCRIPTION

The project requests a Zone Change from PC (Planned Community) zoning district to the PF (Public Facilities) zoning district, General Plan Amendment from the LC (Limited Commercial) Land Use Designation to the PQP (Public and Quasi Public) Land Use Designation, and Use Permit and Design Review for a new public park to be completed in two phases. The project will provide urban open space with opportunities for public recreational amenities, including: a picnic area for 6 tables; an amphitheater with covered stage and sound wall; a plaza gathering area for 20 annual community events with a maximum of 200 attendees; pathways and sidewalks; 24 bicycle parking spaces at West County Trailhead; public restrooms/storage structure; drinking fountain and seating; an improved parking lot for 17 vehicles and one ADA accessible space; drainage improvements; relocated bus stop with a new shelter; trash cans and trash storage area; information kiosk and donor plaque displays; oak woodland and wetlands preservation areas. Hours of operation will be Sunrise to Sunset, 7 days per week. See Figures 1 through 5 below for Project Site Plan, Architectural Plans, and Planting Plan.

Project Phasing
FPA proposes to develop the park in two phases, over a 5-year period:

- Phase 1 (2 years) — Utilities, bus stop, sidewalk, and frontage improvements.
- Phase 2 (3 years) — Parking lot, picnic area and connecting pathways, gathering area and amphitheater, restroom / storage building and landscaping improvements.

Community Events:
In addition to a number of community events that are currently occurring at the undeveloped park site, including the Christmas Tree Lighting, School fund Raiser, Bike and Walk Fundraiser, Farmers Market, Business Exposition, and Skatespot Non-Profit Fundraiser; the anticipated events to occur at the park are School field Trips, Flea Markets, Community Events and other unknown events, plus the Forestville Downtown Oaks Park Fundraiser. Typically, FPA holds 20 events per year in the Park, including the 16 Farmers' Markets, and is requesting 20 events a year as part of the Use Permit application. Events range from 1 hour to 6 hours long and include amplified music and speech.

Water, Wastewater, and Waste Disposal:
A Will Serve letter from the Forestville Water District, dated August 3, 2021, states the property is located within the boundary of the Forestville Water District (FWD) and the "Urban Service Boundary" for the Forestville Water District Sewer Service Zone. Therefore, subject to their rules and regulations, the parcel can be served by and adequate volume is available from their existing water distribution system and sewer collection system.

A waste disposal company is currently serving and will continue to serve the site. A new permanent trash enclosure is proposed.

Circulation:
The Forestville Downtown Park is located on State Highway 116. Entry and exit into the parking lot is from Highway 116. A parking lot is proposed at front of the park with 1 ADA accessible van parking space and 16 9' by 18' parking spaces for a total of 17 spaces. In addition, a bike parking area for 24 bicycles is proposed along the existing West County Trail near Highway 116. New sidewalks will provide ADA-compliant pathways to the restrooms and an accessible ADA picnic table within the picnic area. There will be a relocated bus pullout along Highway 116 with a bus shelter so visitors can continue to use the transit system. In addition, the West County Regional Trail is located on the southern border of the project site so visitors can ride their bikes or walk to and from the park from areas outside Forestville. A pedestrian pathway provides internal circulation between Highway 116 and the West County Regional Trail.

Greenhouse Gas (GHG) Emissions

In order to conform with Sonoma County's GHG (Green House Gas) reduction goals, the project proposes the following GHG reduction facilities and measures:

- Non-motorized trail: the adjacent West County Trail reduces GHG by providing access to pedestrian, bicycle and horseback park users from Sebastopol, Graton and other surrounding communities.
- Bicycle Racks: integral to the park development plan, the 24 bike space and racks reduces GHG by encouraging bicycle use within Forestville.
- Low water use native landscaping: to reduce GHG, native plants and trees were incorporated into the park landscaping plan.
- Mandatory sort refuse area: to reduce GHG, park management program will adopt goals for waste reduction, reuse, and recycling. These goals will be in conformance with Sonoma County's Countywide Integrated Waste Management and Regional Climate Action Plans.
- Local facility for West County: This locally-oriented community park reduces automotive trips to parks in other communities.
- Restroom / Storage Building Energy Conservation: energy conservation measures will be integral to the building design.
- Water conservation: water conserving fixtures will be installed in the park and the future restroom structure.
- Sonoma Clean Power (SCP): FPA will pursue an incentive grant program for installing electric vehicle public charging station in the parking lot. SCP grants cover 100% of installation costs. Revenue can be used to offset operation, maintenance and repairs.

Figure 1. Project Site Plan

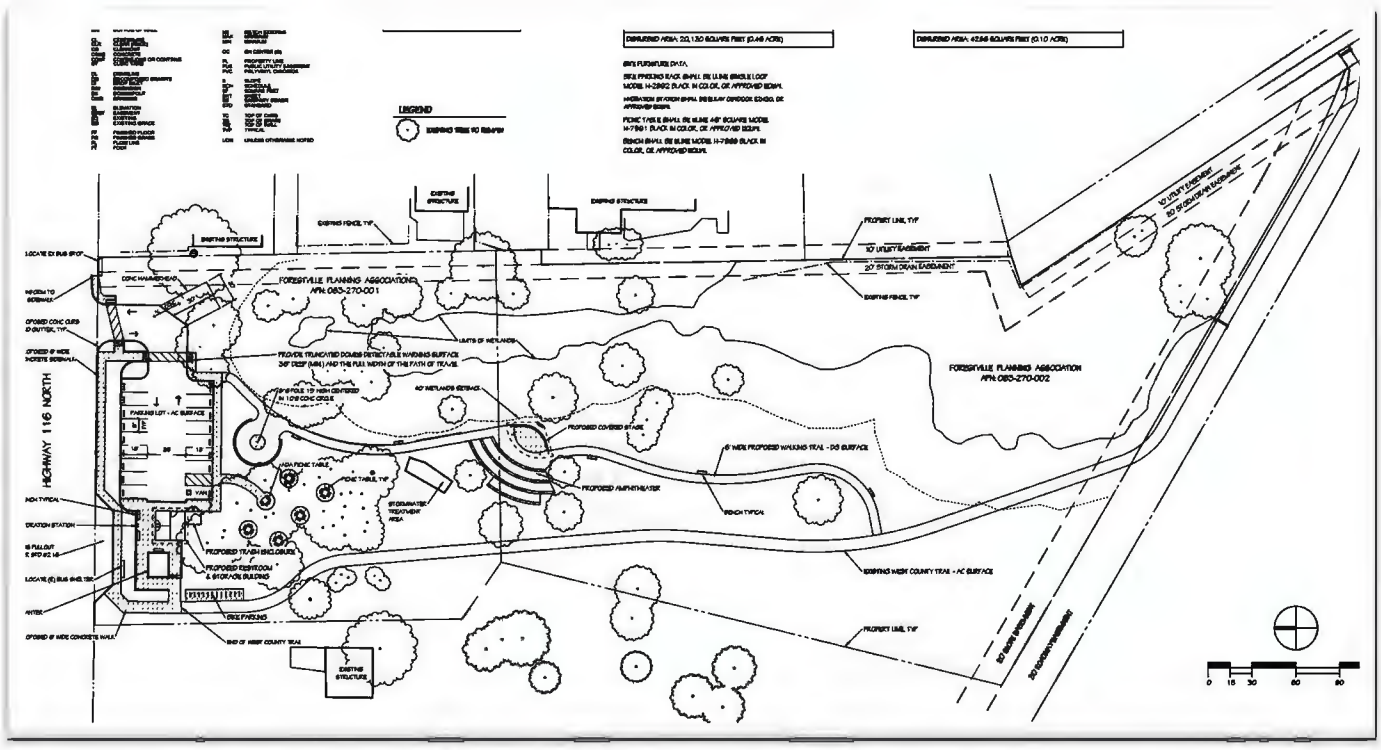


Figure 2: Partial Site Plan

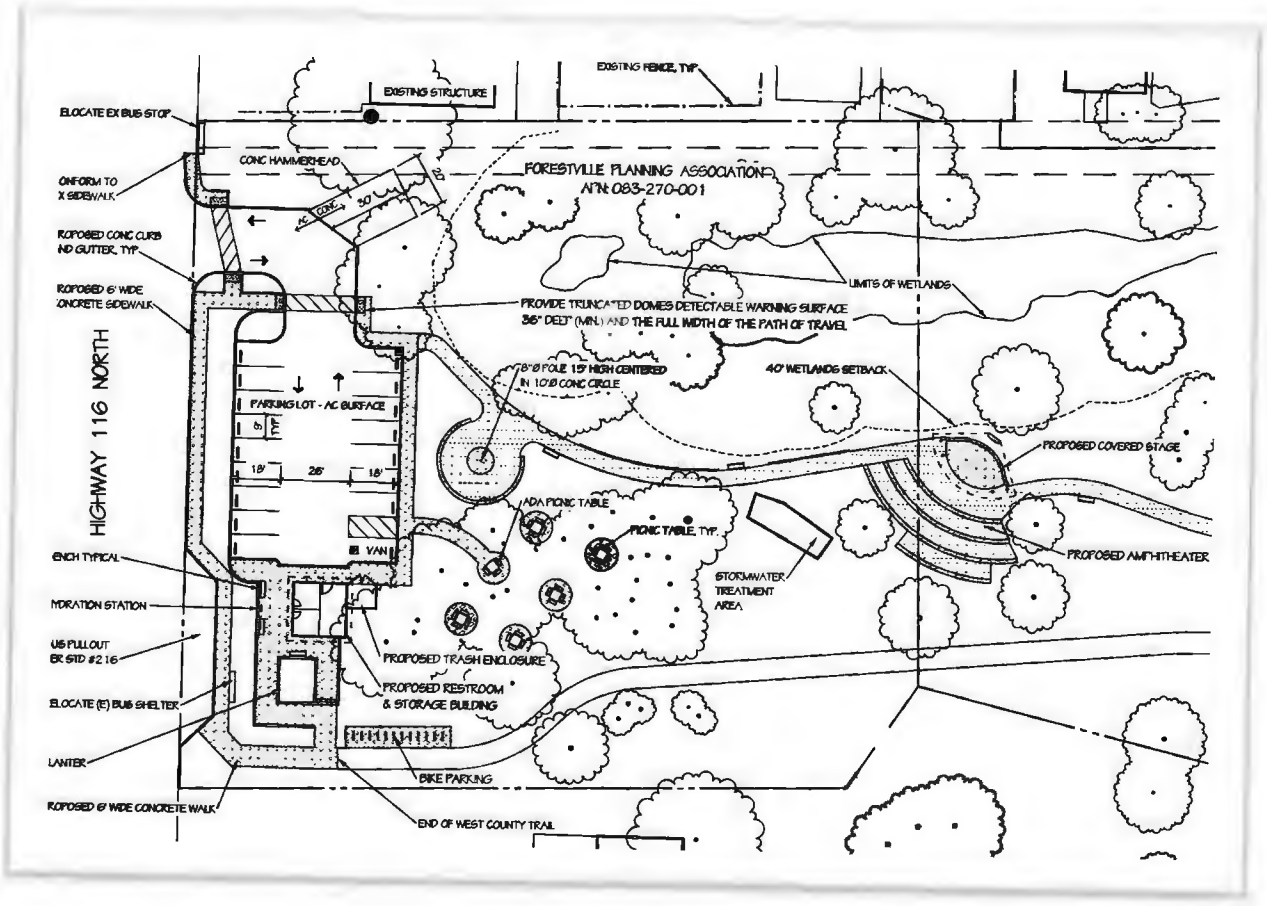


Figure 3: Building Plans and Elevations for Amphitheatre and Restroom/Storage Building

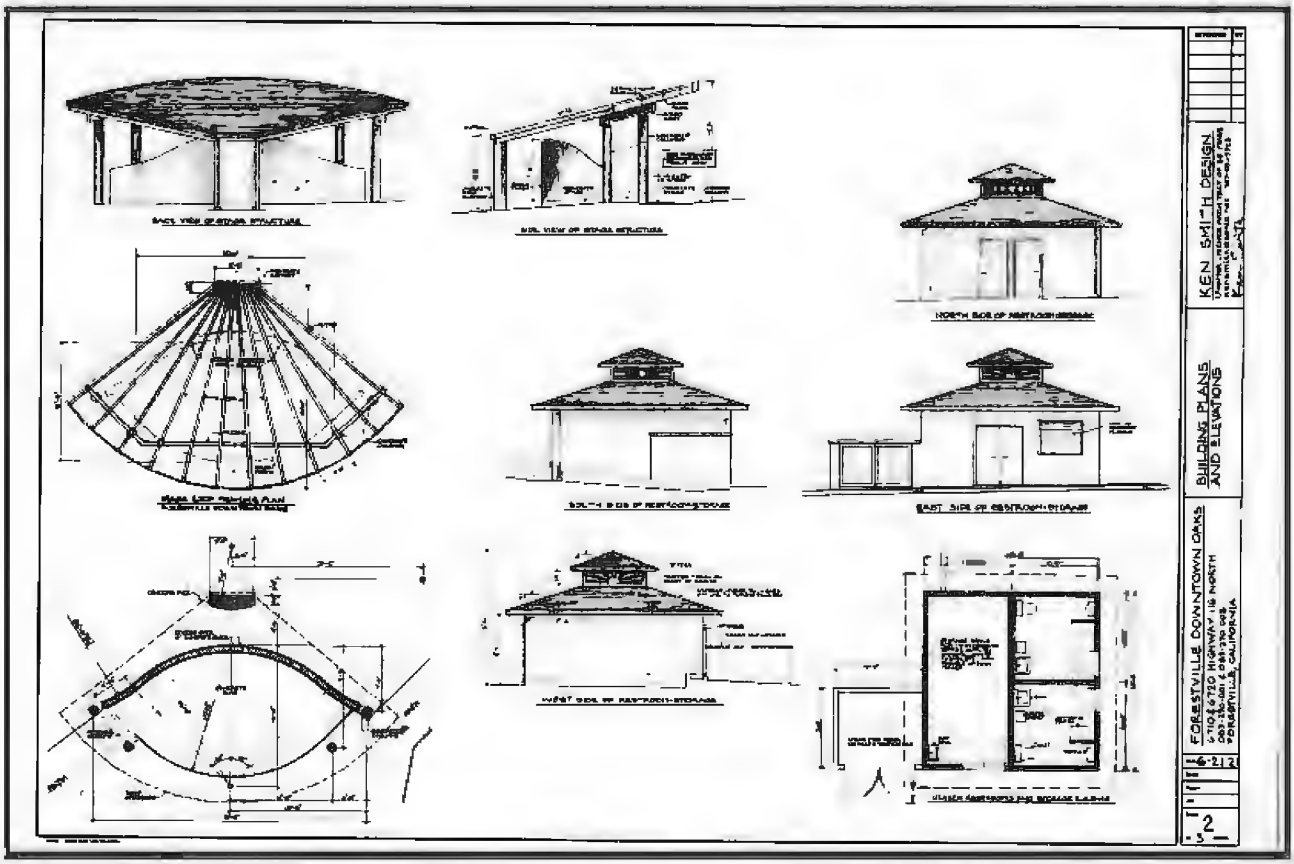


Figure 4: Sound Wall for Amphitheatre

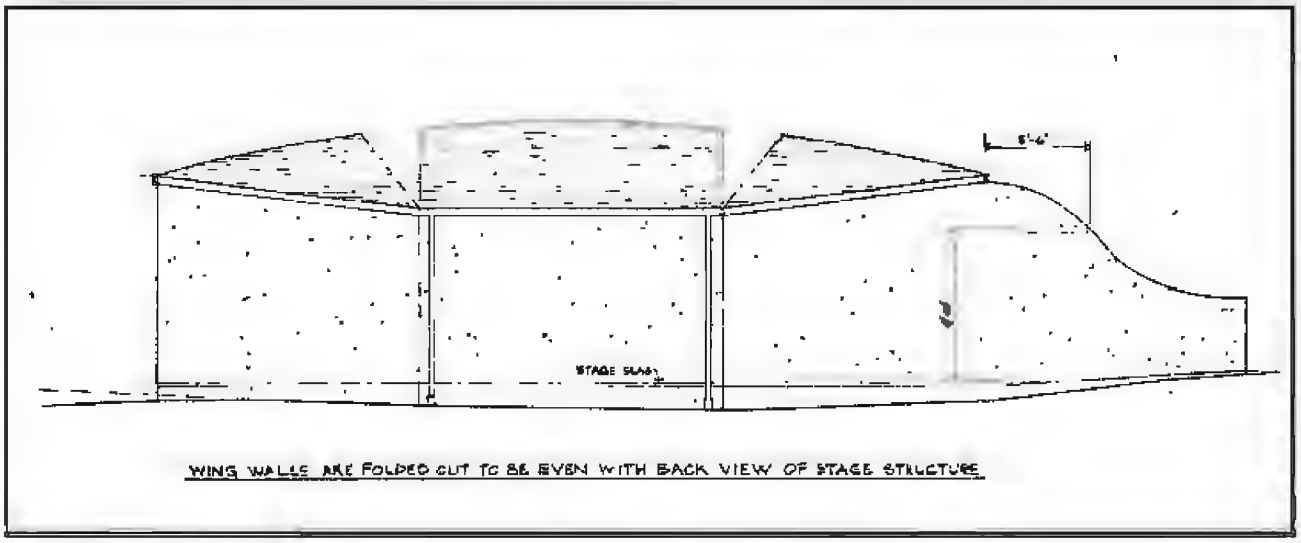
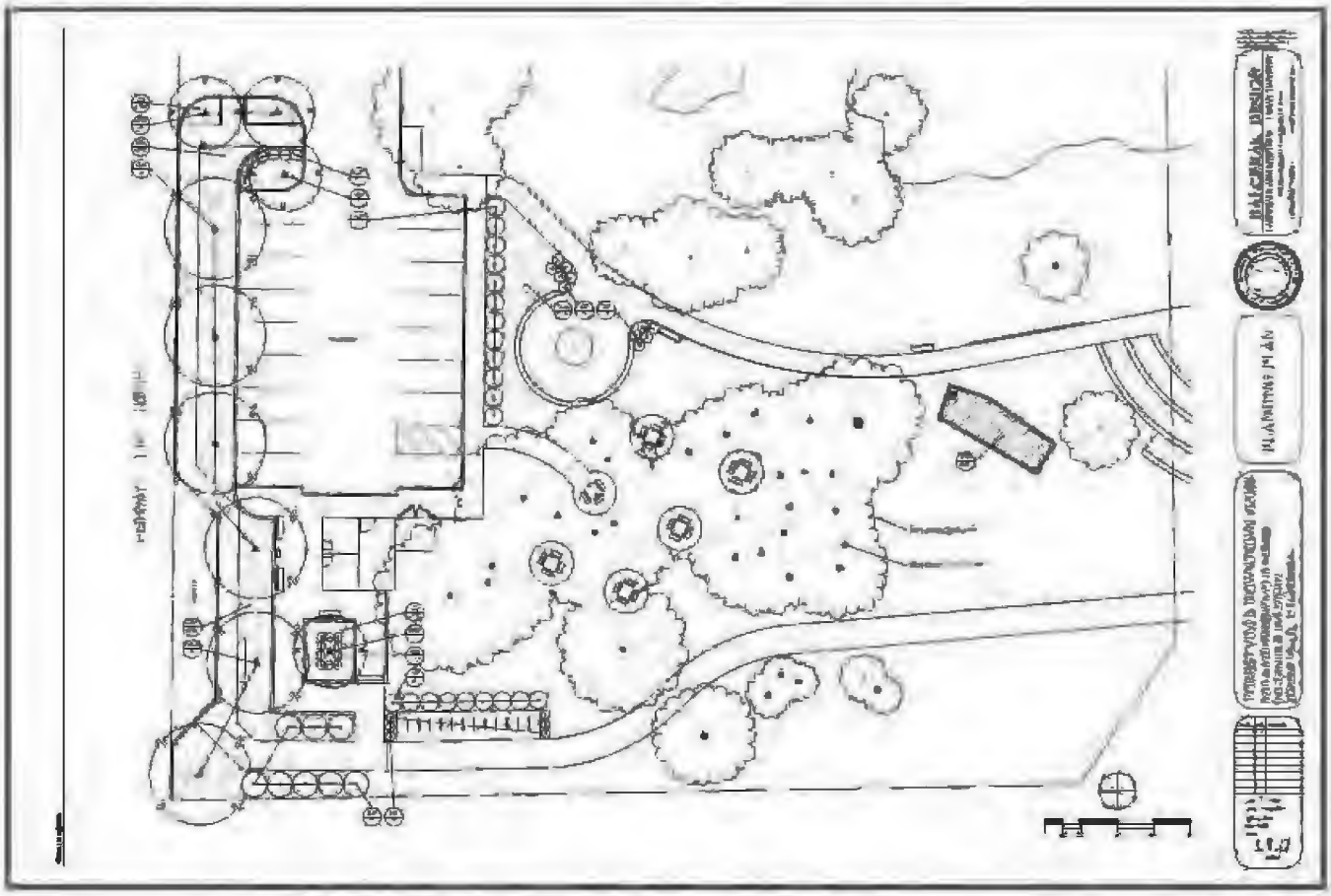


Figure 5: Planting Plan using low water-use native plants



PLANTING LEGEND

KEY	SIZE	BOTANICAL NAME	COMMON NAME	REMARKS	WATER USE
		TREES			
		SHRUBS			
		PERENNIALS			
		GROUNDCOVERS			

IV. SETTING

Surrounding Land and Land Uses:

The park Property is located in downtown Forestville within the Urban Service Area, and is bordered by commercial and residential uses to the north and east, and vineyards to the west and south (Figure 6). Caltrans and Sonoma County Department of Public Works have plans to include a roundabout at Mirabel Road and Highway 116. An existing trailhead and trail extension on the project property currently connects Highway 116 to the West County Regional Trail.

Figure 6: Project Site in Downtown Forestville and Surrounding Area

Topology and Hydrology

The project site features level to moderately sloping topography in the Green Valley Creek watershed, with elevations ranging from approximately 165 feet at the northwest property corner to approximately 130 feet at the southeast property corner. The western portion of the study site generally drains southeastward to a south-draining swale in the eastern portion of the project site. In March 2018, immediately after a rainstorm, surface water was observed running southward along this swale. Ephemeral runoff was likely a dominant source, but a secondary source may be seasonal seepage surfacing through the porous soil along the swale.

A roadway along the eastern edge of the site drains southward in a constructed ditch which leads into a blackberry thicket. There is an underground storm drain leading from Front Street to an outlet in the blackberry thicket into a channel that drains south southeastward off the project site. Drainage from the site's swale and channel flows southwestward for approximately ¼ mile to an unnamed blue-line tributary that joins Green Valley Creek approximately 3/5 mile southwest of the project site. Green Valley Creek flows northward to the Russian River, a traditional navigable water of the United

States, approximately 2-1/3 miles north-northwest of the study site.

Geology and Soils

The geologic unit underlying the project site is the Merced Formation, a late Pliocene marine deposit formed approximately 3 million years ago during the Pliocene Epoch (Alt and Hyndman 2000). The Merced Formation consists of an assortment of medium to fine grained fossiliferous marine sandstone with minor zones of clay and pebbles, tuffaceous in part (California Department of Conservation, Division of Mines and Geology 1975).

The Sonoma County Soil Survey (USDA, Soil Conservation Service 1972) classifies soils on the project site into the Goldridge soil series (see Figure 7, Soil Type Map). The northern portion of the project site is classified Goldridge fine sandy loam, 9 to 15 percent slopes and the southern portion of the project site is classified Goldridge fine sandy loam, 2 to 9 percent slopes. Goldridge soils are moderately well drained fine sandy loams that have a sandy clay subsoil. At a depth of 40 – 60 inches, these soils are underlain by course-grained, weakly consolidated sandstone. There are several areas on the project site with pockets of willow species, generally indicating the presence of subsurface soil moisture year round. (Information in this section and the map are taken from the Forever Forestville Baseline Conservation Easement document.)

Figure 7: Soil Type Map

Vegetation, Habitats, and Biological Resources

The project site is characterized by Valley Oak Woodland, Annual Grassland, and Montane Riparian habitat types (See Figure 8: Vegetation Type Map).

Plant species listed as "invasive exotic" have been designated such by the California Invasive Plant Council (Bossard, et. al. 2000). Plant species listed as "noxious" include noxious weeds identified by the California Department of Food and Agriculture (Best, et. al. 1996). Plants listed with an asterisk (*) are non-native. (Information in this section and the map are taken from the Forever Forestville Baseline Conservation Easement document.)

Valley Oak Woodland

The Valley Oak Woodland on the project site consists primarily of mature valley oak (Quercus lobata)/Oregon oak (Quercus garryana) hybrids, with numerous saplings in the understory. Other tree species include black oak (Quercus kelloggii), immature coast live oak (Quercus agrifolia) and black walnut (Juglans hindsii). Dominant shrub species include poison oak and the invasive Himalayan blackberry. One French broom (Genista monspessulana) plant, a highly invasive species was noted.

Listed below are the species encountered during the December field visits that could be identified.

COMMON NAME	BOTANICAL NAME
valley oak/Oregon oak	Quercus lobata/garryana hybrid
black oak	Quercus kelloggii
coast live oak	Quercus agrifolia
northern California black walnut	Juglans hindsii
blue gum eucalyptus*	Eucalyptus globulus
English plantain* (invasive exotic)	Plantago lanceolata
French broom* (invasive exotic)	Genista monspessulana
bindweed*	Convolvulus arvensis
Harding grass* (invasive exotic)	Phalaris aquatica
teasal* (invasive exotic)	Dipsacus sp.
bristly oxtongue* (invasive exotic)	Picris echioides
filaree*	Erodium sp.
Himalayan blackberry* (invasive exotic)	Rubus armeniacus
wild carrot*	Daucus carota
coyote bush	Baccharis pilularis
poison oak	Toxicodendron diversilobum
coyote bush	Baccharis pilularis

Annual Grassland

Landscaped/disturbed annual grassland is the most prevalent land cover type on the project site and is dominated by species typical of regularly mowed and otherwise disturbed non-native annual grassland. The southern portion of the Property is dominated by the Annual Grassland habitat type.The Annual Grassland habitat type typically consists primarily of introduced grasses and forbs. Due to seasonal dormancy, most of the grasses and forbs could not be identified. Grasses noted include velvet grass (Holcus lanatus) and Harding grass (Phalaris aquatica) both invasive species. Creeping wild rye or beardless wild rye (Elymus triticoides), a native perennial grass that favors wet conditions was noted in the moister area near the southeastern property corner. This habitat type also includes forbs, perennial grasses and an occasional tree, shrub, and vine. Himalayan blackberry is widespread in this habitat type on the project site. Listed below are the species encountered during the December field visits that could be identified.

COMMON NAME	BOTANICAL NAME
velvet grass* (invasive exotic)	Holcus lanatus
Harding grass* (invasive exotic)	Phalaris aquatica
Himalayan blackberry* (invasive exotic)	Rubus armeniacus

wild radish* (invasive exotic)	Raphanus sativus
rush	Juncus sp.
plantain*	Plantago sp.
fennel* (invasive exotic)	Foeniculum vulgare
bindweed*	Convolvulus arvensis
sheep sorrel*	Rumex acetosella
curly dock	Rumex crispus
Italian thistle	Cardus pycnocephalus
bull thistle* (invasive exotic)	Cirsium vulgare
valley oak	Quercus lobata
coyote bush	Baccharis pilularis
fruit trees	

Montane Riparian

The Montane Riparian habitat type is located along the southeastern property line and in moister areas along several swales on the project site. Riparian habitat on site is located on both sides of the open creek channel within the project site. Arroyo willow and red willow are the dominant tree species of this habitat type on the Property. Listed below are plant species encountered within this habitat type on the project site.

COMMON NAME	BOTANICAL NAME
arroyo willow	Salix lasiolepis
red willow	Salix laevigata
coast live oak	Quercus agrifolia
valley oak/Oregon oak	Quercus lobata/garryana hybrid
poison oak	Toxicodendron diversilobum
poison hemlock* (invasive exotic)	Conium maculatum
Himalayan blackberry* (invasive exotic)	Rubus armeniacus
fennel* (invasive exotic)	Foeniculum vulgare
Italian thistle (invasive exotic- noxious)	Carduus pycnocephalus
California wild blackberry	Rubus ursinus
California wild rose	Rosa californica
rush	Juncus sp.
sedge	Carex sp.
Calif. honeysuckle	Lonicera hispidula
hedge nettle	Stachys ajugiodes var. rigida

Stream Channel/Wetland

Wetland/water features under the potential jurisdiction of the U.S. Corps of Engineers, Regional Water Quality Control Board and/or California Department of Fish and Wildlife include 590 linear feet of open stream channel with an ordinary high water mark mapped where the channel is between 4- and 10-feet wide. The stream channel had approximately 1 foot of flowing water during the time of LSA's survey. This open creek channel is supplied by the outlet of a concrete culvert of the storm water drainage system, a 260-foot-long roadside ditch, and 80 feet of an ephemeral erosional feature just north of the open creek channel. See Figure 9: Potential Section 404 Waters of the United States.

Figure 8: Vegetation Type Map

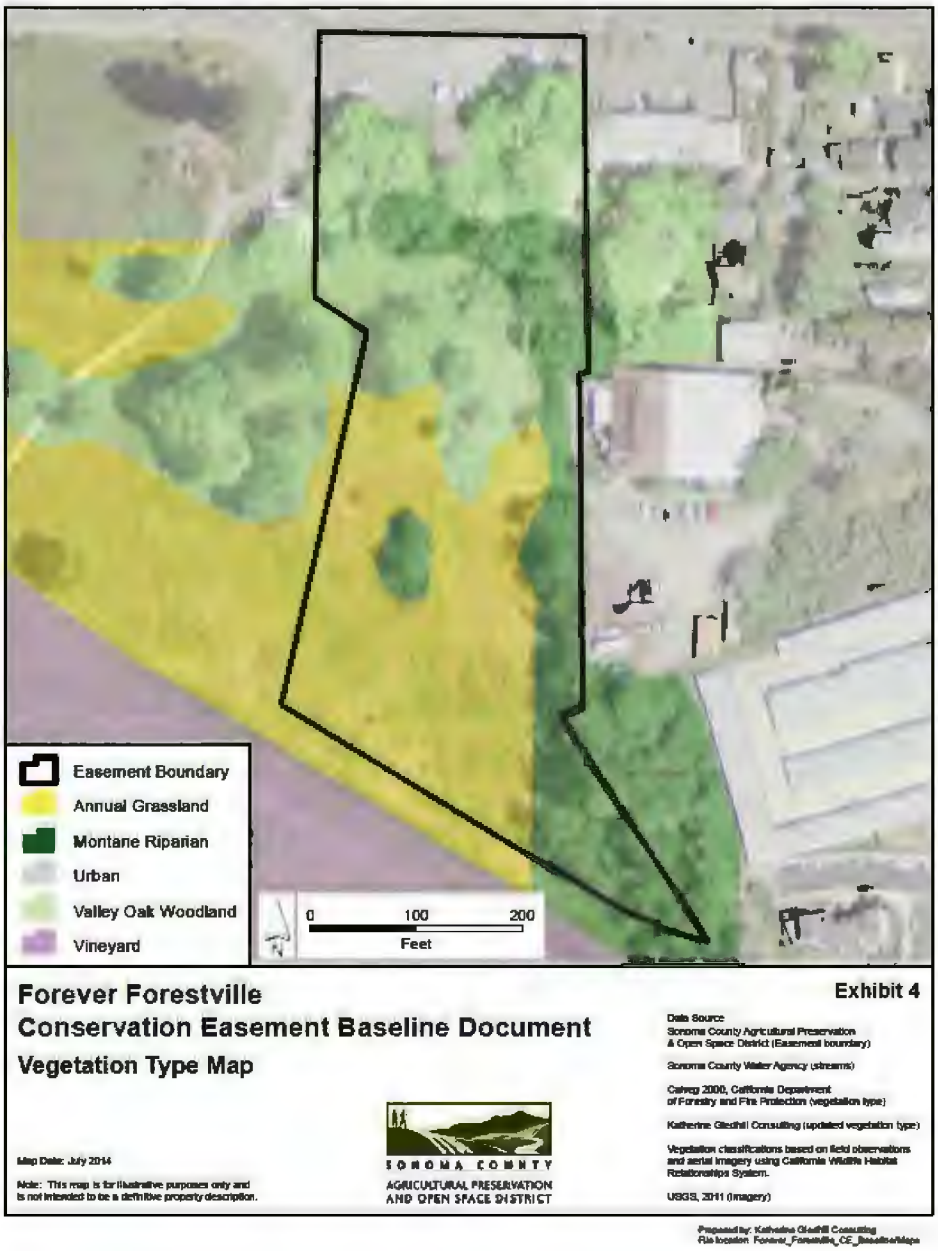
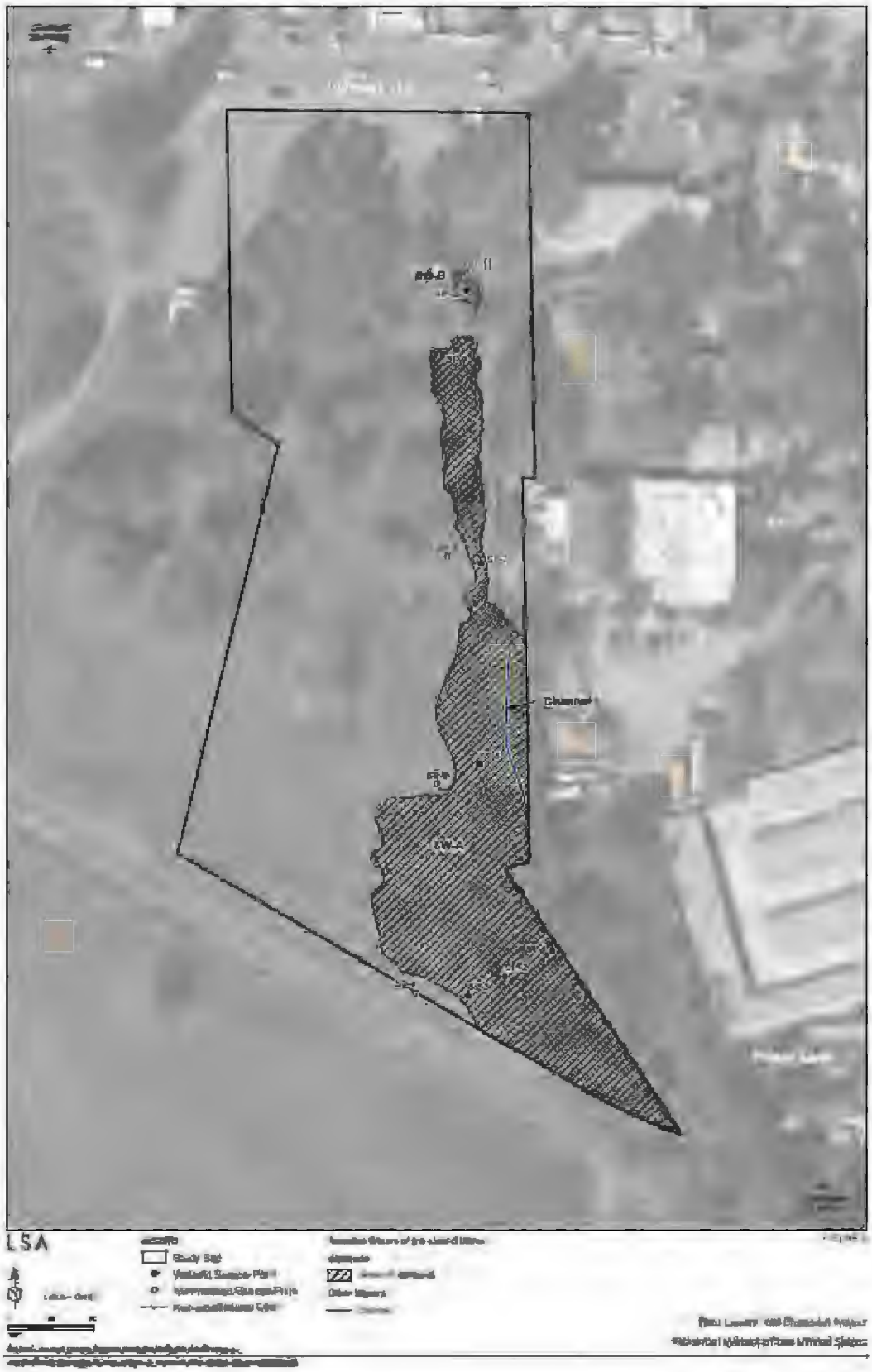


Figure 9: Potential Section 404 Waters of the United States



Wildlife
The habitat types on the project site support a wide variety of wildlife, including habitat for songbirds, raptors, deer and small mammals. Species observed include Red-tailed Hawk (Buteo jamaicensis), Red-shouldered Hawk (Buteo lineatus), Turkey Vulture (Cathartes aura), Acorn Woodpecker (Melanerpes formicivorus), numerous songbirds, and Black-tail Deer (Odocoileus hemionus columbianus).

Noise:
Existing traffic noise is generated by traffic on Hwy 116. The proposed parking lot with entry and exit from Hwy 116 is to be located in the same locations as the existing unimproved parking area and driveway. Existing special events held onsite have included amplified music and speech.

V. ISSUES RAISED BY THE PUBLIC OR AGENCIES

Agency Referral

An updated referral packet was drafted and circulated on November 2, 2021 to inform and solicit comments from selected relevant local, state and federal agencies, local Tribes; and to special interest groups that were anticipated to take interest in the revised project. Comments were received from Sonoma Public Infrastructure, Permit Sonoma Fire Prevention Section, Permit Sonoma Natural Resources Section, Permit Sonoma Building Division, Permit Sonoma Sanitation Section, Sonoma County Grading and Storm Water Section, California Department of Transportation (Caltrans), U.S. Army Corps of Engineers-Regulatory Branch, and Sonoma Local Agency Formation Commission. Their comments included recommended conditions of approval.

The referral responses included several requests for further information and included recommended draft use permit conditions of approval. No public comments have been received to date.

Tribal Consultation Under AB52 and SB18

Assembly Bill 52 and Senate Bill 18 Project Notifications were sent to the following Tribes:

- Cloverdale Rancheria of Pomo Indians
- Dry Creek Rancheria Band of Pomo Indians
- Torres Martinez Desert Cahuilla Indians
- Mishewal Wappo Tribe of Alexander Valley
- Middletown Rancheria Band of Pomo Indians
- Lytton Rancheria of California
- Kashia Pomos Stewarts Point Rancheria
- Federated Indians of Graton Rancheria
- Guidiville Indian Rancheria
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Pinoleville Pomo Nation

One Tribe engaged in formal consultation under Senate Bill 18 (see Section 18. Tribal Cultural Resources below).

VI. OTHER RELATED PROJECTS

The Applicant is coordinating with Sonoma Public Infrastructure with regards to frontage improvements planned through the downtown Forestville corridor.

In 2007 and 2010, the Board of Supervisors adopted Mitigated Negative Declarations and conditionally

approved two projects (tentative map and precise development plan) for the site and surrounding properties under File No. PLP06-0076 and PLP07-0062. Although the General Plan Amendment and Zoning Change requests associated with the 2007 applications completed, the conditions of approval for both development proposals expired and the associated tentative maps did not record. As a result, the project property is zoned Planned Community yet there is no precise development plan established for the project property.

VII. EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts of this project based on the criteria set forth in the State CEQA Guidelines and the County's implementing ordinances and guidelines. For each item, one of four responses is given:

> **No Impact: The project would not have the impact described.** The project may have a beneficial effect, but there is no potential for the project to create or add increment to the impact described.
>
> **Less Than Significant Impact**: The project would have the impact described, but the impact would not be significant. Mitigation is not required, although the project applicant may choose to modify the project to avoid the impacts.
>
> **Less Than Significant with Mitigation Incorporated:** The project would have the impact described, and the impact could be significant. One or more mitigation measures have been identified that will reduce the impact to a less than significant level.
>
> **Potentially Significant Impact:** The project would have the impact described, and the impact could be significant. The impact cannot be reduced to less than significant by incorporating mitigation measures. An environmental impact report must be prepared for this project.

Each question was answered by evaluating the project as proposed, that is, without considering the effect of any added mitigation measures. The Initial Study includes a discussion of the potential impacts and identifies mitigation measures to substantially reduce those impacts to a level of less than significant where feasible. All references and sources used in this Initial Study are listed in the Reference section at the end of this report and are incorporated herein by reference.

The owner, Forestville Planning Association, has agreed to accept all mitigation measures listed in this Initial Study as conditions of approval for the proposed project, and to obtain all necessary permits.

1. AESTHETICS:

Except as provided in Public Resources Code Section 21099, would the project:

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

Comment: The project site has a Scenic Resource designation due to its location along State Highway 116, a Scenic Corridor. The proposed park improvements are designed to connect to an existing public bike path and protect the onsite oak woodlands, grassland, and wetlands will not result in a substantial adverse affect on a scenic vista.

Significance Level: Less than Significant Impact.

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

Comment: The project site is on a State scenic highway and does not result in removal of protected oak trees. The project will not damage any historic buildings.

Significance Level: No Impact.

c) In non-urbanized areas substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Comment: The project will not cause a degradation to the existing visual character or quality of the site and its surroundings. The proposed park improvements are designed to connect to an existing public bike path and protect the onsite oak woodlands, grassland, and wetlands consistent with design standards for construction within a Scenic Corridor.

Scenic Corridors:

Pursuant to the County's Visual Assessment Guidelines, the project ranks "High" in Site Sensitivity since the site is located along Highway 116, a designated Scenic Corridor has a zoning designation of Scenic Resources (SR) protecting scenic resources. The Visual Dominance of the project is "Co-Dominant" due to the location of the park in a downtown urban area. Utilizing the Visual Assessment Guidelines' matrix, the project's visual impact will be significant unless mitigated.

Table 1: Site Sensitivity Table from Sonoma County Visual Assessment Guidelines

	Visual Dominance			
Sensitivity	**Dominant**	**Co-Dominant**	**Subordinate**	**Inevident**
Maximum	Significant	Significant	Significant	Less than significant
High	Significant	**Significant**	Less than significant	Less than significant
Moderate	Significant	Less than significant	Less than significant	Less than significant
Low	Less than significant	Less than significant	Less than significant	Less than significant

Pending final Design Review action, staff finds that the proposed design is consistent with the applicable Design Guidelines and design provisions within County Code. To ensure compliance with the Zoning Code's criteria for developing in a Scenic Corridor, a mitigation measure has been incorporated into the project requiring final DRC approval on the project site plan, building elevations, colors and materials, signage, lighting plan, landscaping and irrigation plans prior to any grading and building permit issuance. With final Design Review, the project will not cause a significant visual impact.

Significance Level:
Less than Significant Impact with Mitigation Incorporated

Mitigation VIS-1:
Prior to issuance of building permits, the project site plan, building elevations, colors and materials, signage, lighting plan, landscaping and irrigation plans shall be submitted for design review by Permit Sonoma or the Design Review Committee.

Mitigation Monitoring VIS-1:
The Permit and Resource Management Department shall not issue the Building Permit until the project site plan, building elevations, colors and materials, signage, lighting plan, landscaping and irrigation plan has been submitted that is consistent with the approved plans and County standards. Permit Sonoma shall not sign off final occupancy on the Building Permit until a site inspection of the property has been conducted that indicates all lighting improvements have been installed according to the approved plans and conditions.

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

Comment: Exterior night lighting at events could create a new source of light and glare in the area. The County's standard development regulations under Article 82 of the Zoning Code (Design Review), minimizes the impact of new development by ensuring that exterior lighting is designed to prevent glare, and preclude the trespass of light on to adjoining properties and into the night sky.

The above mentioned Mitigation Measure requires the lighting plan to be reviewed and approved by the Design Review Committee. The project will require exterior lighting as necessary to comply with the California Building Code. A standard condition of approval requires "All new exterior lighting to be dark sky compliant, low mounted, downward casting and fully shielded to prevent glare. Lighting shall not wash out structures or any portions of the site. Light fixtures shall not be located at the periphery of the property and shall not spill over onto adjacent properties or into the night sky. Flood lights are not permitted. Lighting shall shut of automatically after closing and security lighting shall be motion sensor activated.

Prior to final occupancy of building permits, the applicant is required to demonstrate compliance with exterior lighting requirements by providing PRMD photograph documentation of all exterior light fixtures installed. By incorporating mitigation measures and standard conditions of approval, the project will not result in a new source of substantial light or glare with would adversely affect day or nighttime view in the area.

Significance Level:
Less than Significant with Mitigation Incorporated

Mitigation: See Mitigation Measure VIS-1

2. AGRICULTURE AND FOREST RESOURCES:

Would the project:

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

Comment: According to the Sonoma County Important Farmlands Map, approximately 3 acres of the southern portion of the project property is designated Farmland of Local Importance. The proposed park improvements (parking lot, restroom/storage building, picnic tables and pathways) are primarily located in the northern portion of the property which is designated as Urban and Built-Up Land of the Sonoma County Important Farmlands Map. A 6-foot-wide new walking trail and outdoor amphitheater with a covered stage are proposed in the central portion of the property of the property. These improvements would not convert a significant amount of designated farmland to non-agricultural use and therefore potential impacts are less than significant. Additionally, the project property is encumbered by a Conservation Easement held by Sonoma County Agricultural Preserve and Open Space District which limits the extent of park improvements to a building envelope in the northern half of the property and requires the use of the property be restricted to natural resource protection, recreational, and educational

uses as defined in documents recorded under O.R. #2013-110043 and #2013-110044.

Significance Level: Less than Significant Impact.

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

Comment:
The property is not zoned for agricultural use and is not under a Williamson Act contract.

Significance Level: No Impact.

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

Comment: The project site is not under the TP (Timberland Production) zoning district, nor will the project conflict with or cause a change to lands under TP zoning.

Significance Level: No Impact.

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

Comment: The project does not result in a loss of forest land or conversion of forest land to non-forest use. The project site is zoned Planned Community with a Limited Commercial land use designation, located in downtown Forestville. The onsite oak woodland, grasslands and wetlands onsite will continue to be protected.

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Significance Level: No Impact.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use?

Comment: The project does not involve other changes in the existing environment that could result in conversion of farmland to non-agricultural use or forest land to non-forest use.

Significance Level: No Impact.

3. AIR QUALITY:

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

Would the project:

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

Comment: The project is within the jurisdiction of the Northern Sonoma County Air Pollution Control District (NSCAPCD). The Northern Sonoma County Air Pollution Control District has not published emission guidelines for conventional and GHG emissions, hence, published guidelines developed by the Bay Area Air Quality Management District (BAAQMD) are used. The project would not create any conflicts or obstruct implementation of the BAAQMD guidelines.

Significance Level: No Impact.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standard?

Comment: State and Federal governments have established standards for six criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide, sulfur dioxide, and particulates with a diameter of less than 10 and 2.5 microns (PM_{10} and $PM_{2.5}$, respectively). In addition to criteria air pollutants, there are other, secondary pollutants that can lead to the formation of criteria air pollutants. For example, nitrogen oxides (NO_x) and volatile organic compounds (VOC) react with sunlight and can lead to the formation of ground level ozone.

Since the geographic area under the Northern Sonoma County Air Pollution Control District's (NSCAPCD) jurisdiction is in attainment for all criteria air pollutants, meaning there have been no violations of State or Federal air quality standards), no CEQA thresholds of significance have been set for the NSCAPCD. NSCAPCD does, however, suggest the use of the Bay Area Air Quality Management District (BAAQMD) CEQA thresholds and mitigation measures.

Construction Emissions
Construction emissions are assumed to be negligible as the construction project is quite small and much of the activity would not require heavy-duty equipment or extensive truck trips.

Operational Emissions

The Sonoma County General Plan Resource Conservation Element addresses pollutants from mobile sources (e.g. transportation sources). The project will create traffic, therefore the following goal would be relevant to the proposed project:

Goal RC-13: Preserve and maintain good air quality and provide for an air quality standard that will protect human health and preclude crop, plant, and property damage in accordance with requirements of the federal and State CAA's (Clean Air Act).

State and Federal standards have been established for the "criteria pollutants": ozone, carbon monoxide, nitrogen dioxide, sulphur dioxide, and particulate (PM10 and PM2.5). The project would not add any new equipment or processes that would have significant emissions or require permits from the air district.

Mobile emissions are criteria pollutants that would result from additional traffic generated by the project. The project would cause mobile emissions because it would add traffic, however, the increase over the existing traffic at the site would be very small. The emission of criteria pollutants would be less than significant.

The BBQMD guidelines include a table (Table 6, Projects with Potentially Significant Emissions) with typical projects and the size of the project that is likely to generate significant quantities of NOX, one of the ozone precursors. All of the examples in the table generate at least 3000 trips a day. Further, the BAAQMD's guidelines recommends that no detailed air quality analysis be done for projects generating fewer than 2000 trips per day. This project is far smaller than the examples given, and it is concluded that the project traffic would not emit significant criteria pollutants.

Significance Level: Less Than Significant Impact

c) Expose sensitive receptors to substantial pollutant concentrations?

Comment: Sensitive receptors include hospitals, schools, convalescent facilities, and residential areas. The project would not expose sensitive receptors to significant concentrations of pollutants because the project will have no long-term effect on PM_{10}. All surfaces will be paved, gravel, landscaped or otherwise

treated to stabilize bare soils, and operational dust generation will be insignificant. There could be a significant short-term emission of dust (which would include $PM_{2.5}$ and PM_{10}) during construction that would affect nearby residents. Dust emissions can be reduced to less than significant by the mitigation measure described below.

Significance Level:
Less than Significant with Mitigation Incorporated

Mitigation Measure AIR-1:
The following dust control measures shall be included in the project:

a. Water or alternative dust control method shall be sprayed to control dust on construction areas, soil stockpiles, and staging areas during construction as directed by the County.
b. Trucks hauling soil, sand and other loose materials over public roads will cover the loads, or will keep the loads at least two feet below the level of the sides of the container, or will wet the load sufficiently to prevent dust emissions.
c. Paved roads will be swept as needed to remove soil that has been carried onto them from the project site.

Mitigation Monitoring AIR-1:
Building/grading permits shall not be approved for issuance by Permit Sonoma staff until the above notes are printed on all construction plans including plans for building and grading.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Comment:
The BAAQMD's CEQA Air Quality Guidelines (2022) identifies land uses associated with odor complaints to include, but are not limited to, wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants.

The proposed park improvements and outdoor community event spaces are not expected to result in other emissions. Construction equipment may generate odors during project construction activities, but the impact would be less than significant as it would be a short-term impact that ceases upon completion of the project.

Significance Level: Less than Significant Impact.

4. BIOLOGICAL RESOURCES:

Regulatory Framework

The following discussion identifies federal, state and local environmental regulations that serve to protect sensitive biological resources relevant to the California Environmental Quality Act (CEQA) review process.

Federal

Federal Endangered Species Act (FESA)

FESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of Interior and the Secretary of Commerce are designated in FESA as responsible for identifying endangered and threatened species and their critical habitat, carrying out programs for the conservation of these species, and rendering opinions

regarding the impact of proposed federal actions on listed species. The USFWS and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) are charged with implementing and enforcing the FESA. USFWS has authority over terrestrial and continental aquatic species, and NOAA Fisheries has authority over species that spend all or part of their life cycle at sea, such as salmonids.

Section 9 of FESA prohibits the unlawful "take" of any listed fish or wildlife species. Take, as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such action." USFWS's regulations define harm to mean "an act which actually kills or injures wildlife." Such an act "may include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3). Take can be permitted under FESA pursuant to sections 7 and 10. Section 7 provides a process for take permits for federal projects or projects subject to a federal permit, and Section 10 provides a process for incidental take permits for projects without a federal nexus. FESA does not extend the take prohibition to federally listed plants on private land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

The Migratory Bird Treaty Act of 1918 (MBTA)

The U.S. MBTA (16 USC §§ 703 et seq., Title 50 Code of Federal Regulations [CFR] Part 10) states it is "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill; attempt to take, capture or kill; possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or in part, of any such bird or any part, nest or egg thereof…" In short, under MBTA it is illegal to disturb a nest that is in active use, since this could result in killing a bird, destroying a nest, or destroying an egg. The USFWS enforces MBTA. The MBTA does not protect some birds that are non-native or human-introduced or that belong to families that are not covered by any of the conventions implemented by MBTA. In 2017, the USFWS issued a memorandum stating that the MBTA does not prohibit incidental take; therefore, the MBTA is currently limited to purposeful actions, such as directly and knowingly removing a nest to construct a project, hunting, and poaching.

The Clean Water Act (CWA)

The CWA is the primary federal law regulating water quality. The implementation of the CWA is the responsibility of the U.S. Environmental Protection Agency (EPA). However, the EPA depends on other agencies, such as the individual states and the U.S. Army Corps of Engineers (USACE), to assist in implementing the CWA. The objective of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 and 401 of the CWA apply to activities that would impact waters of the U.S. The USACE enforces Section 404 of the CWA and the California State Water Resources Control Board enforces Section 401.

Section 404.

As part of its mandate under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into "waters of the U.S.". "Waters of the U.S: include territorial seas, tidal waters, and non-tidal waters in addition to wetlands and drainages that support wetland vegetation, exhibit ponding or scouring, show obvious signs of channeling, or have discernible banks and high-water marks. Wetlands are defined as those areas "that are inundated or saturated by surface 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)). The discharge of dredged or fill material into waters of the U.S. is prohibited under the CWA except when it is in compliance with Section 404 of the CWA. Enforcement authority for Section 404 was given to the USACE, which it accomplishes under its regulatory branch. The EPA has veto authority over the USACE's administration of the Section 404

program and may override a USACE decision with respect to permitting. Substantial impacts to waters of the U.S. may require an Individual Permit's Projects that only minimally affect waters of the U.S. may meet the conditions of one of the existing Nationwide Permits, provided that such permit's other respective conditions are satisfied. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions (see below).

Section 401.

Any applicant for a federal permit to impact waters of the U.S. under Section 404 of the CWA, including Nationwide Permits where pre-construction notification is required, must also provide to the USACE a certification or waiver from the State of California. The "401 Certification" is provided by the State Water Resources Control Board through the local Regional Water Quality Control Board (RWQCB). The RWQCB issues and enforces permits for discharge of treated water, landfills, storm-water runoff, filling of any surface waters or wetlands, dredging, agricultural activities and wastewater recycling. The RWQCB recommends the "401 Certification" application be made at the same time that any applications are provided to other agencies, such as the USACE, USFWS, or NOAA Fisheries. The application is not final until completion of environmental review under the CEQA. The application to the RWQCB is similar to the pre-construction notification that is required by the USACE. It must include a description of the habitat that is being impacted, a description of how the impact is proposed to be minimized and proposed mitigation measures with goals, schedules, and performance standards. Mitigation must include a replacement of functions and values, and replacement of wetland at a minimum ratio of 2:1, or twice as many acres of wetlands provided as are removed. The RWQCB looks for mitigation that is on site and in-kind, with functions and values as good as or better than the water-based habitat that is being removed.

State

California Endangered Species Act (CESA)

Provisions of CESA protect state-listed threatened and endangered species. The CDFW is charged with establishing a list of endangered and threatened species. CDFW regulates activities that may result in "take" of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of "take" under the California Fish and Game Code (CFGC), but CDFW has interpreted "take" to include the killing of a member of a species which is the proximate result of habitat modification.

Fish and Game Code 1600-1602

Sections 1600-1607 of the CFGC require that a Notification of Lake or Streambed Alteration Agreement (LSAA) application be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed actions in the application and, if necessary, prepares a LSAA that includes measures to protect affected fish and wildlife resources, including mitigation for impacts to bats and bat habitat.

Nesting Birds

Nesting birds, including raptors, are protected under CFGC Section 3503, which reads, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." In addition, under CFGC Section 3503.5, "it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto". Passerines and non-passerine land birds are further protected under CFGC 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest

abandonment and/or loss of reproductive effort is considered "take" by CDFW.

Non-Game Mammals

Sections 4150-4155 of the CFGC protects non-game mammals, including bats. Section 4150 states "A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. A non-game mammal may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission". The non-game mammals that may be taken or possessed are primarily those that cause crop or property damage. Bats are classified as a non-game mammal and are protected under the CFGC.

California Fully Protected Species and Species of Special Concern

The classification of "fully protected" was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibians and reptiles at §5050, birds at §3503 and §3511, and mammals at §4150 and §4700) dealing with "fully protected" species state that these species "…may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with "fully protected" species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

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

Porter-Cologne Water Quality Control Act

The intent of the Porter-Cologne Water Quality Control Act (Porter-Cologne) is to protect water quality and the beneficial uses of water, and it applies to both surface and ground water. Under this law, the State Water Resources Control Board develops statewide water quality plans, and the RWQCBs develop basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of both statewide and basin plans. Waters regulated under Porter-Cologne, referred to as "waters of the State," include isolated waters that are not regulated by the USACE. Projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, any person discharging, or proposing to discharge, waste (e.g., dirt) to waters of the State must file a Report of Waste Discharge and receive either waste discharge requirements (WDRs) or a waiver to WDRs before beginning the discharge.

Local

Sonoma County General Plan

The *Sonoma County General Plan 2020* Land Use Element and Open Space & Resource Conservation Element both contain policies to protect natural resource lands including, but not limited to, watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors.

Riparian Corridor Ordinance

The RC combining zone is established to protect biotic resource communities, including critical habitat areas within and along riparian corridors, for their habitat and environmental value, and to implement the provisions of the General Plan Open Space and Resource Conservation and Water Resources Elements. These provisions are intended to protect and enhance riparian corridors and functions along designated streams, balancing the need for agricultural production, urban development, timber and mining operations and other land uses with the preservation of riparian vegetation, protection of water resources, floodplain management, wildlife habitat and movement, stream shade, fisheries, water quality, channel stability, groundwater recharge, opportunities for recreation, education and aesthetic appreciation and other riparian functions and values.

Oak Woodland and Valley Oak Habitat Ordinances

The Oak Woodland and Valley Oak Habitat Combining Districts are established to advance the protection, preservation, and enhancement of oak trees and Oak Woodlands in Sonoma County for the benefit of present and future generations and to implement Sonoma County General Plan Policies OSRC-7l, related to Oak Woodlands, and OSRC-7m, related to valley oak habitat. Removal of oaks within Oak Woodlands is prohibited unless the removal meets exceptions for certain listed land uses promote public, health, safety, and welfare, including uses related to hazard reduction or removal, conservation, agriculture, pest control, and residential maintenance. Where proposed valley oak or Oak Woodland removal is subject to a discretionary permit process, mitigation measures to address loss of trees apply, such as measures to ensure no net loss of Oak Woodlands or, for the highest quality woodlands, would provide a unique public benefit equal to or greater than the value associated with removed oaks

Sonoma County Tree Protection Ordinance

The Sonoma County Tree Protection Ordinance (Sonoma County Code of Ordinances, Chapter 26, Article 88, Sec. 26-88-010 [m]) establishes policies for protected tree species in Sonoma County. Protected trees are defined (Chapter 26, Article 02, Sec. 26- 02-140) as the following species: big leaf maple (*Acer macrophyllum*), black oak (*Quercus kelloggii*), blue oak (*Quercus douglasii*), coast live oak (Quercus *agrifolia*), interior live oak (*Quercus wislizenii*), madrone (*Arbutus menziesii*), oracle oak (*Quercus morehus*), Oregon oak (*Quercus garryana*), redwood (Sequoia sempervirens), valley oak (*Quercus lobata*), California bay (*Umbellularia californica*), and their hybrids.

Would the project:

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

Comment:
Special-Status Species

Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed and proposed species. In addition, California Department of Fish and Wildlife (CDFW) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, U.S. Fish and Wildlife Service (The Service) Birds of Conservation Concern, and CDFW special-status invertebrates, are all considered special-status species. Although CDFW Species of

Special Concern generally have no special legal status, they are given special consideration under the California Environmental Quality Act (CEQA). In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918. Plant species on California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants with California Rare Plant Ranks (Rank) of 1 and 2 are also considered special-status plant species and must be considered under CEQA. Bat species designated as "High Priority" by the Western Bat Working Group (WBWG) qualify for legal protection under Section 15380(d) of the CEQA Guidelines. Species designated High Priority" are defined as "imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.

Endangered Species Act

The Endangered Species Act (ESA) of 1973, as amended (16 USC 1531 *et seq.*) was enacted to provide a means to identify and protect endangered and threatened species. Under the Section 9 of the ESA, it is unlawful to take any listed species. "Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a listed species. "Harass" is defined as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. "Harm" is defined as an act which actually kills or injures fish or wildlife and may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering. Actions that may result in "take" of a federal-listed species are subject to The Service or National Marine Fisheries Service (NOAA Fisheries) permit issuance and monitoring. Section 7 of ESA requires federal agencies to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat for such species. Any action authorized, funded, or carried out by a federal agency or designated proxy (e.g., Army Corps of Engineers) which has potential to affect listed species requires consultation with The Service or NOAA Fisheries under Section 7 of the ESA.

Critical Habitat

Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The ESA requires federal agencies to consult with the USFWS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or projects do not adversely modify critical habitat to the point that it will no longer aid in the species' recovery. In many cases, this level of protection is similar to that already provided to species by the ESA jeopardy standard. However, areas that are currently unoccupied by the species but which are needed for the species' recovery are protected by the prohibition against adverse modification of critical habitat.

Essential Fish Habitat

Essential Fish Habitat (EFH) is regulated through the NMFS, a division of the National Oceanic and Atmospheric Administration (NOAA). Protection of Essential Fish Habitat is mandated through changes implemented in 1996 to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to protect the loss of habitat necessary to maintain sustainable fisheries in the United States. The Magnuson-Stevens Act defines Essential Fish Habitat as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" [16 USC 1802(10)]. NMFS further defines essential fish habitat as areas that "contain habitat essential to the long-term survival and health of our nation's fisheries" Essential Fish Habitat can include the water column, certain bottom types such as sandy or rocky bottoms, vegetation such as eelgrass or kelp, or structurally complex coral or oyster reefs. Under regulatory guidelines issued by NMFS, any federal agency that authorizes, funds, or undertakes action that may affect EFH is required to consult with NMFS (50 CFR 600.920).

Staff Analysis:
In 2018, Sonoma County Regional Parks commissioned LSA to prepare a Biological Resource Assessment on the project property, prior to construction of the West County Trail. LSA methods included the following:

Prior to the field visits, LSA biologists searched the CDFW's California Natural Diversity Data Base (CNDDB) and the California Native Plant Society's (CNPS's) Electronic Inventory of Rare and Endangered Vascular Plants of California for records of special-status species or habitat in the project vicinity. Additionally, LSA reviewed the Habitat Site Assessment for the Crinella Vineyard Installation and Housing Development Project (WRA 2003). The Habitat Site Assessment for the Crinella site includes the West County Trail Extension Project site in addition to large areas south and west of the site. Therefore, many significant elements discussed in the Crinella Habitat Site Assessment are not applicable to the West County Trail Extension Project site.

On March 16, 2018, LSA Senior Biologist/Wetland Specialist Bernhard Warzecha surveyed the study site to assess habitat for special-status species and sensitive habitats. Wildlife, wildlife sign, and plant species observed during the survey were documented in field notes. Additionally, potential aquatic resources subject to regulation by the Corps, RWQCB, and/or CDFW, including stream channels, riparian corridors, and seasonal wetlands, were documented and mapped (Figure 3).

LSA senior soil scientist Chip Bouril investigated the study site on June 7, 2018. Potential jurisdictional boundaries were mapped using a global positioning system (GPS) receiver with submeter accuracy. Boundaries were determined by following a combination of the limits of hydrophytic vegetation, the limits of observed redoximorphic mottling and wetland hydrology indicators, and topographic breaks. LSA established 11 wetland Sample Points on the study site. All data from the 11 Sample Points were recorded on standard wetland determination data forms.

On May 30, and July 20, 2018, LSA Senior Botanist Tim Milliken conducted focused rare plant surveys along the trail alignment. The surveys were conducted to coincide with the blooming periods of the special-status plants that had the potential to occur along the trail alignment.

LSA found the project may impact special-status species, nesting birds, and roosting bats as discussed further below.

Special Status Plant Species:
LSA's CNDDB search resulted in occurrence records for 32 species of special-status plants in the 5-mile vicinity of the study site (CDFW 2018). Following LSA's reconnaissance-level survey, the potential for these species to occur within the study site was assessed based on the habitats present, the proximity of known species occurrences, and knowledge of the species' range (see Table A of attachment 1). Ten of the plant species are unlikely to occur on the site due to the extent of disturbance, and/or the lack of suitable habitat (i.e., closed-cone coniferous forest, north coast coniferous forest, coastal prairie, chaparral, naturally occurring lakes and streams, vernal pools, alkaline areas, and serpentine soils). Twenty-one of the species have a low potential to occur due to the presence of disturbed, but potentially suitable grassland and riparian/wetland habitat. One species has a moderate potential to occur.

LSA found the project would not result in any significant impacts to special status plant species due to no suitable habitat present and none of the 32 plant species were observed during the focused plants surveys. Therefore, no mitigation is recommended.

Wildlife:
The study site provides habitat for several wildlife species, including amphibians, reptiles, birds, and mammals. Wildlife or wildlife sign observed during LSA's survey consist of turkey vulture (Cathartes aura), American crow (Corvus brachyrhynchos), northern mockingbird (Mimus polyglottos), California towhee (Melozone crissalis), California scrub-jay (Aphelocoma californica), house sparrow (Passer domesticus), Botta's pocket gopher (Thomomys bottae) burrows, and dusky-footed woodrat

(Neotoma fuscipes monochroura) houses.

Special Status Wildlife:
From the results of the literature and database review, LSA developed a list of special-status wildlife species to be evaluated for the project (see Table A in Attachment 1). Following LSA's reconnaissance-level survey, the potential for these species to occur within the study site was assessed based on the habitats present within and adjacent to the study site, the proximity of known species occurrences, and knowledge of the species' range and/or mobility. Five of the special-status wildlife species evaluated are not likely to occur on the study site due to the absence of suitable habitat caused by the extent of disturbance, the site's prior use of as a landscaped backyard, and the lack of suitable habitat in the vicinity of the site. One of the species, the pallid bat (Antrozous pallidus), has a low potential to occur due to potential suitable habitat present.

Implementation of Mitigation Measure BIO-1 and BIO-2 would reduce potential impacts to nesting birds and roosting pallid bats.

Significance Level:
Less than Significant with Mitigation Incorporated

Mitigation Measure BIO-1:
The following measures shall be taken to avoid potential inadvertent destruction or disturbance of nesting birds on and near the project site as a result of construction-related vegetation removal and site disturbance:

(a) To avoid impacts to nesting birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) shall occur outside the avian nesting season (generally prior to February 1 or after August 31). Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest.

(b) If construction-related activities are scheduled to occur during the nesting season (generally February 1 through August 31), a qualified biologist shall conduct a habitat assessment and preconstruction nesting survey for nesting bird species no more than seven (7) days prior to initiation of work. In addition, the qualified biologist conducting the surveys shall be familiar with the breeding behaviors and nest structures of birds known to nest on the project site. Surveys shall be conducted at the appropriate times of day during periods of peak activity (e.g., early morning or dusk) and shall be of sufficient duration to observe movement patterns. Surveys shall be conducted on the project site and within 100 feet of the construction limits for nesting non-raptors and 500 feet for nesting raptors, as feasible. If the survey area is found to be absent of nesting birds, no further mitigation would be required. However, if project activities are delayed by more than seven (7) days, an additional nesting bird survey shall be performed.

(c) If pre-construction nesting bird surveys result in the location of active nests, no site disturbance (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 100 feet of non-raptor nests and 500 feet of raptor nests. Monitoring by a qualified biologist shall be required to ensure compliance with the relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented. Active nests found inside the limits of the buffer zones or nests within the vicinity of the project site showing signs of distress from project construction activity, as determined by the qualified biologist, shall be monitored daily during the duration of project construction for changes in breeding behavior. If changes in behavior are observed (e.g., distress, disruptions), the buffer shall be immediately adjusted by the qualified biologist until no further interruptions to breeding behavior are detected. The nest protection

buffers may be reduced if the qualified biologist determines in coordination with CDFW that construction activities would not be likely to adversely affect the nest. If buffers are reduced, twice-weekly monitoring may need to be conducted to confirm that construction activity is not resulting in detectable adverse effects on nesting birds or their young. The qualified biologist and CDFW may agree upon an alternative monitoring schedule depending on the construction activity, season, and species potentially subject to impact. Construction shall not commence within the prescribed buffer areas until a qualified biologist has determined that the young have fledged or the nest site is otherwise no longer in use. Following completion of pre-construction nesting bird surveys (if required), a report of the findings shall be prepared by a qualified biologist and submitted to the County prior to the initiation of construction related activities that have the potential to disturb any active nests during the nesting season.

(d) Specifically, with regards to potential burrowing owl wintering habitat in the remnant annual/perennial grasslands and else-where on the project site, a pre-wintering season survey shall be conducted by a qualified biologist during any year in which construction activities will occur between September 1 and January 31 following the 2012 CDFW Staff Report on Burrowing Owl Mitigation focusing on vegetation type and height, suitable burrows (with an opening of 11 cm in diameter and a depth greater than 150 cm, burrow surrogates culverts, piles of concrete, rubble, piles of soil, pipes, etc.) and the presence of burrowing owl sign (tracks, molted feathers, cast pellets, prey remains, egg shell fragments, owl white wash, and nest burrow decoration material, and the presence of burrowing owl individuals or pairs. If evidence of burrowing owls is detected, the locations shall be mapped and Permit Sonoma and CDFW shall be contacted to determine if additional mitigation measures are needed to avoid impacts on the species.

Mitigation Monitoring BIO-1:
Permit Sonoma staff will not issue permits for ground disturbing activities between February 1st and August 31st until the site has been surveyed by a qualified biologist to ensure proper fencing and buffers are in place prior to issuance.

Mitigation Measure BIO-2:
Bat Protection: Prior to any tree or building removal, a qualified bat biologist shall conduct a habitat assessment for bats. The habitat assessment shall be conducted a minimum of 30 days prior to tree or building removal and shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, or exfoliating bark for colonial species, and suitable canopy for foliage-roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. Trees may be removed only if: a) presence of bats is presumed, or documented during the surveys described below, in trees with suitable bat habitat, and removal using the two-step removal process detailed below occurs only during seasonal periods of bat activity from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified bat biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or complete visual examination of roost features that establish absence of roosting bats. Two-step tree removal shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under direct supervision and instruction by a qualified bat biologist with experience conducting two-step tree removal limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and 2) the second day the entire tree shall be removed.

Mitigation Monitoring BIO-2:
Permit Sonoma shall include this mitigation measure in the conditions of approval for any planning, grading and building permits. Permit Sonoma staff shall ensure the results of the bat habitat assessment have been submitted to CDFW for written acceptance prior to starting Project activities.

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

Comment: All proposed park improvements, including the parking area, restrooms, picnic tables, amphitheater, and new pathways will be constructed more than 40-feet from the onsite seasonal wetlands and riparian area. The project does not result in removal of riparian vegetation or any trees onsite.

Significance Level: Less Than Significant Impact

c) 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?

Comment:

Regulatory Framework

The Army Corps of Engineers (Corps) regulates "Waters of the United States", including adjacent wetlands, under Section 404 of the federal Clean Water Act. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. Potential wetland areas are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act. Areas that are inundated for sufficient duration and depth to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as "other waters" and are often characterized by an ordinary high water mark (OHWM). The discharge of dredged or fill material into a Waters of the U.S. (including wetlands) generally requires a permit from the Corps under Section 404 of the Clean Water Act.

"Waters of the State" are regulated by the Regional Water Quality Control Board (Water Board) under the State Porter-Cologne Water Quality Control Act. Waters of the State are defined by the Porter-Cologne Act as any surface water or groundwater, including saline waters, within the boundaries of the State. RWQCB jurisdiction includes "isolated" wetlands and waters that may not be regulated by the ACOE under Section 404 (such as roadside ditches). Section 401 of the Clean Water Act specifies that any activity subject to a permit issued by a federal agency must also obtain State Water Quality Certification (401 Certification) that the proposed activity will comply with state water quality standards. If a proposed project does not require a federal permit, but does involve dredge or fill activities that may result in a discharge to Waters of the State, the Water Board has the option to regulate the dredge and fill activities under its state authority through its Waste Discharge Requirements (WDR) program.

Per Sonoma County Code Section 11.14.110 all grading must be 50 feet from the identified wetland unless a wetlands report recommends a greater or lesser setback.

In 2018, Sonoma County Regional Parks commissioned LSA to conduct a Biological Resource Assessment of the project property. On March 16, 2018, LSA Senior Biologist/Wetland Specialist Bernhard Warzecha surveyed the study site to assess habitat for special-status species and sensitive habitats. Wildlife, wildlife sign, and plant species observed during the survey were documented in field notes. Additionally, potential aquatic resources subject to regulation by the Corps, RWQCB, and/or CDFW, including stream channels, riparian corridors, and seasonal wetlands, were documented and mapped. LSA senior soil scientist Chip Bouril investigated the study site on June 7, 2018. Potential jurisdictional boundaries were mapped using a global positioning system (GPS) receiver with submeter accuracy. Boundaries were determined by following a combination of the limits of hydrophytic vegetation, the limits of observed redoximorphic mottling and wetland hydrology

indicators, and topographic breaks. LSA established 11 wetland Sample Points on the study site. All data from the 11 Sample Points were recorded on standard wetland determination data forms.

On October 17, 2018, LSA submitted a wetlands delineation request to the U.S. Army Corps of Engineers (Corps) to verify the extent of the Corps jurisdiction under Section 404 Waters of the Clean Water Act on the project property (see Attachment 2). On December 19, 2018, the Corps visited the project property with Sonoma County Regional Parks and LSA. The Corps concurred with LSA's wetland delineation and a recommendation for a 40-foot wetland setback.

Implementation of Mitigation Measures BIO-3 and BIO-4 would prevent direct impacts on the seasonal wetlands. This impact would be less than significant.

Significance Level:
Less than Significant with Mitigation Incorporated

Mitigation Measure BIO-3:
The applicant shall obtain authorization from the Army Corp of Engineers' and other applicable agency's permits. Construction activities shall include the use of temporary fencing and water quality controls to protect the aquatic features onsite.

Mitigation Monitoring BIO-3:
Building/grading permits shall not be approved for issuance by Permit Sonoma staff until clearance from the Army Corp of Engineer's and other applicable agencies or proof of permitting is provided.

Mitigation Measure BIO-4:
The applicant shall identify in final project plans the 40-foot setback from the seasonal wetlands for construction activities associated with the project. Construction activities will include the use of temporary fencing and water quality controls to protect these features.

Mitigation Monitoring BIO-4:
Building/grading permits shall not be approved for issuance by Permit Sonoma staff until the 40-foot wetlands setback is identified on the building, grading, and improvement plans or proof of exception is provided.

Mitigation Measure BIO-5:
Prior to the issuance of building permits, grading permits, or advertising for construction bids, and appropriate disposal site shall be identified. The contractor will be required to provide evidence to the County that the site does not affect wetlands or other protected resources such as trees. Surplus concrete rubble or pavement that cannot be reused at the project site shall either be disposed of at an acceptable and legally permitted disposal site or taken to a permitted concrete and/or asphalt recycling facility.

Mitigation Monitoring BIO-5:
Building/grading permits shall not be approved for issuance by Permit Sonoma staff until contractor provides evidence of appropriate disposal locations and plans.

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

Comment:
The project site is located between urban areas and agricultural lands. The site contains a trailhead for the West County Trail and aquatic features, oak woodland, and grasslands. The proposed project does not include tree removal and is designed to avoid streams and wetlands on the property and therefore is not anticipated to interfere with the movement of wildlife.

Significance Level: Less than Significant Impact.

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

Comment:
The proposed new park improvements do not require the removal of any trees. Tree removal requires compliance with Sonoma County Tree Protection and Oak Woodland Ordinance. In the event that any trees onsite would be impacted by construction, implementation of Mitigation Measure BIO-6 below will reduce any potential tree removal impacts to less than significant.

Significance Level:
Less than Significant with Mitigation Incorporated

Mitigation Measure BIO- 6:
The applicant shall provide a final landscape plan demonstrating compliance with the County's Tree Protection and Valley Oak Habitat and Oak Woodland Ordinances, including tree protection and replacements consistent with Ordinance requirements.

Mitigation Monitoring BIO-6:
The applicant shall provide the final landscape plan prior to issuance of a grading permit, with tree plantings confirmed by Permit Sonoma site inspection prior to issuance of an occupancy permit.

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

Comment:
Habitat Conservation Plans and natural community conservation plans are site-specific plans to address effects on sensitive species of plants and animals. The project site is not located in an area subject to a habitat conservation plan or natural community conservation plan.

Significance Level: No Impact

5. CULTURAL RESOURCES:

Would the project:

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

Comment:
The applicant submitted a study prepared by Tom Origer & Associates, dated October 7, 2022. The methods used to complete the cultural resources study included archival research at the Northwest Information Center (NWIC), examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the study area. No historical resources were identified within the project site.

Significance Level: No Impact.

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

Comment:
Assembly Bill 52 and Senate Bill 18 Project Notifications were sent to the Cloverdale Rancheria of Pomo

Indians, Dry Creek Rancheria Band of Pomo Indians, Torres Martinez Desert Cahuilla Indians, Mishewal Wappo Tribe of Alexander Valley, Middletown Rancheria Band of Pomo Indians, Lytton Rancheria of California, Kashia Pomos Stewarts Point Rancheria and Federated Indians of Graton Rancheria. These Native American tribes were invited to consult on the project pursuant to Public Resources Code sections 21080.3.1 and 21080.3.2. One Tribe engaged in consultation under SB18.

The applicant submitted a study prepared by Tom Origer & Associates, dated October 7, 2022. The methods used to complete the cultural resources study included archival research at the Northwest Information Center (NWIC), examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the study area. No cultural resources were identified within the project site. Permit Sonoma staff met with Tribal representatives for consultation over a series of meetings and conducted one site inspection. Both parties determined there is a possibility for tribal cultural resources to be found on-site during construction of the park improvements. Therefore, the standard mitigation measure TCR-1 will be implemented to reduce the potential impact to less than significant.

Significance Level:
Less than Significant with Mitigation Incorporated

Mitigation:
See Mitigation Measure TCR-1

Mitigation Monitoring:
See Mitigation Monitoring TCR-1

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Comment:
The project site is not located within vicinity of any known unique paleontological resource or site or unique geologic. As described in Section 5.b) above, mitigation measures are in place to protect any paleontological resources or prehistoric, historic or tribal cultural resources that may be encountered during ground-disturbing work.

Significance Level:
Less than Significant with Mitigation Incorporated

Mitigation:
See Mitigation Measure TCR-1

Mitigation Monitoring:
See Mitigation Monitoring TCR-1

6. ENERGY

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Comment:
The project will not result in significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Standard construction practices will be used. Operation of a community park and improved trailhead to the West County Trail would reduce consumption of energy resources through the following:

- The adjacent West County Trail provides non-motorized access to pedestrian, bicycle and horseback park users from Sebastopol, Graton and other surrounding communities.
- The 24 bike space and racks would encourage bicycle use within Forestville.
- The proposed park and the integral bus stop along State Hwy. 116 and downtown Forestville, would provide alternative park access via Sonoma County Transit Bus Route 20.
- This locally-oriented community park may reduce automotive trips to parks in other communities.
- Energy conservation measures would be integral to the restroom/storage building design.
- The Forestville Planning Association would pursue an incentive grant program for installing electric vehicle public charging station in the parking lot.

Significance Level: Less Than Significant Impact.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Comment: The project would comply with the latest Title 24 Building Energy Efficiency Standards, which are intended to increase the energy efficiency of new development projects in the state and move the State closer to its zero-net energy goals. The project would be automatically enrolled as a member of the SCP, which serves as the Community Choice Aggregate (CCA) for the County. SCP works in partnership with PG&E to deliver GHG-efficient electricity to customers within its member jurisdictions. The project would also be all electric and provide EV charging facilities consistent with state efforts (e.g., 2022 Scoping Plan Update) for energy efficiency and fossil fuel use reduction. Implementation of the projects would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Significance Level: Less than Significant Impact.

7. GEOLOGY AND SOILS

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

Comment:
The site is not located in an Alquist-Priolo fault zone or on a known fault based on the Safety Maps in the Sonoma County General Plan. The Uniform Building Code has been developed to address seismic events in California and development which complies with the Code will result in buildings which should withstand the most severe reasonably anticipated seismic event.

Significance Level:
Less than Significant Impact

ii. Strong seismic ground shaking?

Comment:
All of Sonoma County is subject to seismic shaking that would result from earthquakes along the San Andreas, Healdsburg-Rodgers Creek, and other faults. According to the Sonoma County General Plan 2020 Public Safety Element Earthquake Ground Shaking Hazard Areas map, the project site is located in

an area where the expected relative intensity of ground shaking & damage in Sonoma County is very strong. Predicting seismic events is not possible at this time, nor is providing mitigation that can entirely reduce the potential for injury and damage that can occur during a seismic event. Project conditions of approval require that building permits be obtained for all construction and that the project meet all standard seismic and soil test/compaction requirements. The project would therefore not expose people to substantial risk of injury from seismic shaking.

Significance Level: Less than Significant Impact.

iii. Seismic-related ground failure, including liquefaction?

Comment:
Strong ground shaking can result in liquefaction, the sudden loss of shear strength in saturated sandy material, resulting ground failure. Areas of Sonoma County most at risk of liquefaction are along San Pablo Bay and in alluvial valleys. The subject site is not identified on the map in Safety Element (PS-1c) as Very High, High or Medium Liquefaction Hazard Areas.

Significance Level: Less than Significant Impact

iv. Landslides?

Comment:
Steep slopes characterize much of Sonoma County, particularly the northern and eastern portion of the County. Where these areas are underlain by weak or unconsolidated earth materials landslides are a hazard. The subject site is not identified in any deep-seated landslide hazard area on the map in Safety Element (PS-1d). Additionally, all structures will be required to meet building permit requirements, including seismic safety standards and soil test/compaction requirements.

Significance Level: Less than Significant Impact

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

Comment:
The project includes grading, cuts and fills which require the issuance of a grading permit. Unregulated grading, both during and post construction, has the potential to increase the volume of runoff from a site which could have adverse downstream flooding and further erosion impacts, and increase soil erosion on and off site which could adversely impact downstream water quality.

County grading ordinance design requirements, adopted County grading standards and best management practices (such as silt fencing, straw wattles, construction entrances to control soil discharges, primary and secondary containment areas for petroleum products, paints, lime and other materials of concern, etc.), mandated limitations on work in wet weather, and standard grading inspection requirements, will be applied to the project, and are specifically designed to prevent soil erosion and loss of topsoil.

The County adopted grading ordinances and standards and related conditions of approval which enforce them are specific, and also require compliance with all standards and regulations adopted by the State and Regional Water Quality Control Board, such as the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements, Low Impact Development (LID) and any other adopted best management practices. Therefore, no significant adverse soil erosion or related soil erosion water quality impacts are expected given the mandated conditions and standards that need to be met.

Significance Level: Less than Significant Impact

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

subsidence, liquefaction or collapse?

Comment:
The project site is subject to seismic shaking as described in item 7.a.ii. Project conditions of approval require that building permits be obtained for all construction and that the project meet all standard seismic and soil test/compaction requirements.

Significance Level: Less than Significant Impact.

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

Comment:
Potential impacts will be addressed through appropriate structural design and construction standards. For the proposed project, soils at the site have not been tested for their expansive characteristics. No substantial risks to life or property would be created from soil expansion at the proposed project, even if it were to be affected by expansive soils. The project will also be conditioned to require building permits to be approved in compliance with Building Code standards.

Significance Level:
Less than Significant Impact

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

Comment:
The project is located in downtown Forestville and will connect to the public sewer system.

Significance Level: No Impact.

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

Comment:
No, based on a report prepared by Tom Origer & Associates, dated October 7, 2022, no known archaeological resources were found on the site.

Significance Level: No Impact.

8. GREENHOUSE GAS EMISSIONS:

Would the project:

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

Comment:
Section 15064.4 of the State CEQA Guidelines assists lead agencies in determining the significance of the impacts of GHG emissions. Section 15064.4 gives lead agencies the discretion to assess emissions quantitatively or qualitatively. The CEQA Guidelines do not establish a threshold of significance. Lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or other experts, so long as any threshold chosen is supported by substantial evidence.

The Bay Area Air Quality Management District's (BAAQMD) 2022 Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects acknowledges that evaluating climate impacts under CEQA can be challenging because global climate change is inherently a cumulative problem, rather than the result of a single source of greenhouse gas (GHG) emissions. With that in mind, the BAAQMD has recommended thresholds of significance as to whether a proposed project would have a "cumulatively considerable" contribution to the significant cumulative impact on climate change.

For land use development projects, the BAAQMD recommends using an approach which evaluates a project based on its effect on California's efforts to meet the State's long-term climate goals. Using this approach, a project that is consistent with and would contribute its "fair share" towards achieving those long-term climate goals can be found to have a less-than-significant impact on climate change under CEQA because the project would, in effect, help to solve the problem of global climate change. Applying this approach, the Air District has analyzed what will be required of new land use development projects to achieve California's long-term climate goal of carbon neutrality by 2045.

Because GHG emissions from the land use sector come primarily from building energy use and from transportation, these are the areas that the BAAQMD evaluated to ensure that a project can and will do its fair share to achieve carbon neutrality. With respect to building energy use, the BAAQMD recommends replacing natural gas with electric power and eliminating inefficient or wasteful energy usage. This will support California's transition away from fossil fuel–based energy sources and will bring a project's GHG emissions associated with building energy use down to zero as the state's electric supply becomes 100 percent carbon free. With respect to transportation, the BAAQMD recommends that projects be designed to reduce project-generated Vehicle Miles Travelled (VMT) and to provide sufficient electric vehicle (EV) charging infrastructure to support a shift to EVs over time.

The BAAQMB has found, based on this analysis, that a new land use development project being built today either must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b), or must incorporate the following design elements to achieve its "fair share" of implementing the goal of carbon neutrality by 2045:

A. Projects must include, at a minimum, the following project design elements:
    1. Buildings
        a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
        b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
    2. Transportation
        a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's (OPR) 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA:
            i. Residential projects: 15 percent below the existing VMT per capita
            ii. Office projects: 15 percent below the existing VMT per employee
            iii. Retail projects: no net increase in existing VMT
        b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

There is currently no applicable local GHG reduction strategy, such as an adopted Climate Action Plan, for Sonoma County. Therefore, the project was analyzed under criterium A above and discussed below.

- Buildings: As discussed in the Energy Section 6a, the project does include new construction and the new construction is not expected to result in wasteful, inefficient or unnecessary energy usage. The new restroom/storage building will require compliance with the latest Title 24 Building Energy Efficiency Standards. Additionally, the project will use Sonoma Clean Power as their utility provider. Therefore, impacts due to energy consumption would be less than significant.

- Transportation: The project does not include new residences, office buildings, or commercial retail, and therefore, does not contribute any VMT to these three land use categories of concern. (Note that "commercial retail" refers to commercial retail spaces, not to a small ancillary retail space associated with another land use). As discussed in the Transportation Section 17b, VMT refers to the amount and distance of automobile travel attributable to a project. The County of Sonoma has not yet adopted specific VMT policies or thresholds of significance. However, the OPR Technical Advisory includes a screening threshold for small projects that generate or attract fewer than 110 trips per day, stating this level of vehicle activity may generally be assumed to result in a less than significant transportation impact. The Updated Focused Traffic Analysis for the Forestville Town Park Project (W-Trans, May 23, 2018) found the proposed project is anticipated to generate an average of 93 daily trips which falls below the OPR's threshold. Therefore, it is reasonable to conclude that the project can be presumed to have a less-than-significant impact on VMT.

- The latest California Green Building Standards Code (CALGreen) was published in 2022 and went into effect on January 1, 2023. The 2022 CALGreen Tier 2 requirements for EV changing stations apply to new non-residential buildings and require that off-street EV capable spaces be provided for a new non-residential development project with 10 or more parking spaces (note there are separate EV requirements for residential projects). The project proposes 17 improved parking spaces and will be subject to 2022 CALGreen Tier 2 requirements for EV changing stations.

The BAAQMD 2022 guidance does not propose construction-related climate impact thresholds, stating that GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions, and that land use project thresholds are better focused on addressing operational GHG emissions, which represent the vast majority of project GHG emissions. Therefore, construction related GHG would not exceed established thresholds.

Because the project does not propose the use of natural gas in the new restroom/storage building, would use minimal energy, does not include new residential, office, or retail uses, would generate low VMT, and is required to meet the 2022 CALGreen requirements for EV charging stations, the project would contribute its "fair share" towards achieving the State's long-term climate goals, and therefore, would have a less-than-significant impact on climate change.

Significance Level: Less than Significant Impact

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

Comment:
The County's adopted goals and policies include GP Policy OSRC-14.4 to reduce greenhouse gas emissions 25% below 1990 levels by 2015. Sonoma County emissions in 2015 were 9% below 1990 levels, while the countywide population grew 4%. In May 2018, the Board of Supervisors adopted a Resolution of Intent to Reduce Greenhouse Gas Emissions that included adoption of the Regional Climate Protection Agency's goal to further reduce greenhouse gas emissions by 40% below 1990 levels by 2030 and by 80% below 1990 levels by 2050, consistent with SB32 and AB197 climate pollution reduction targets. The Resolution of Intent included specific measures that can further reduce greenhouse gas emissions.

All new development is required to evaluate all reasonably feasible measures to reduce greenhouse gas

emissions and enhance carbon sequestration. The following greenhouse gas emission reduction facilities and measures are incorporated into the project by the applicant and are included as a condition of approval:

- **Non-motorized trail:** the adjacent West County Trail reduces GHG by providing access to pedestrian, bicycle and horseback park users from Sebastopol, Graton and other surrounding communities.
- **Bicycle Racks:** integral to the park development plan, the 24 bike space and racks reduces GHG by encouraging bicycle use within Forestville.
- **County Bus Stop and Shelter:** the proposed park and the integral bus stop along State Hwy. 116 and downtown Forestville, will reduce GHG by providing alternative park access via Sonoma County Transit Bus Route 20.
- **OSD signage:** Open Space District's (OSD) park acquisition funding require the installation of an informational sign(s) describing the Open Space District's (OSD) funding of the development rights purchase. The informational sign reduces GHG by increasing community awareness of the OSD's land preservation programs and benefits.
- **Natural Resource Protections:** the park's OSD Conservation Easement will reduce GHG by protecting wetland, oak woodland, animal and plant habitat environments.
- **Low water-use native landscaping:** to reduce GHG, native plants and trees were incorporated into the park landscaping plan.
- **Mandatory sort refuse area:** to reduce GHG, park management program will adopt goals for waste reduction, reuse, and recycling. These goals will be in conformance with Sonoma County's Countywide Integrated Waste Management and Regional Climate Action Plans.
- **Local facility for West County:** This locally-oriented community park reduces automotive trips to parks in other communities.
- **Restroom / Storage Building Energy Conservation:** energy conservation measures will be integral to the building design.
- **Water conservation:** water conserving fixtures will be installed in the park and the future restroom structure.
- **Sonoma Clean Power (SCP) —** FPA will pursue an incentive grant program for installing electric vehicle public charging station in the parking lot. SCP grants cover 100% of installation costs. Revenue can be used to offset operation, maintenance and repairs.

As discussed in section (a) above, the proposed project would not be expected to generate GHG emissions that exceed BAAQMD-recommended CEQA thresholds. The project, therefore, would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

Significance Level: Less Than Significant Impact.

9. HAZARDS AND HAZARDOUS MATERIALS:

Would the project:

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

Comment:
Small amounts of potentially hazardous materials will be used on this project such as fuel, lubricants, and cleaning materials. Proper use of materials in accordance with local, state, and federal requirements, and as required in the construction documents, will minimize the potential for accidental releases or emissions from hazardous materials. This will assure that the risks of the project uses impacting the human or biological environment will be reduced to a less than significant level. There will be no increase in traffic as a result of this project, thus an increase in exposure due to the risks of transporting hazardous materials will not change as a result of the project.

Significance Level:
Less than Significant Impact

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

Comment:
The project would not generate or produce substantial quantities of hazardous material or unsafe conditions. During construction activities there could be spills of hazardous materials. To address this possibility, the project is required to comply with all applicable hazardous materials handling and storage requirements and would use qualified contractors for construction. See Item 9.a. above.

Significance Level:
Less than Significant Impact

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

Comment: The subject property is not within a one-quarter mile of an existing or proposed school. The project does not involve hazardous emissions or handle hazardous materials.

Significance Level: No Impact.

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

Comment:
The project site was not identified on, or in the vicinity of, any parcels on lists compiled by the California Environmental Protection Agency, Regional Water Quality Control Board, California Department of Toxic Substances Control, and the CalRecycle Waste Management Board Solid Development Waste Information System (SWIS). The project area is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Significance Level: No Impact.

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

Comment:
The site is not within the Airport Referral Area as designated by the Sonoma County Comprehensive Airport Land Use Plan (ALUC).

Significance Level:
No Impact

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

Comment:
The project would not impair implementation of, or physically interfere with the County's adopted emergency operations plan. There is no separate emergency evacuation plan for the County. In any case, the project would not change existing circulation patterns, access and egress would continue to be from State Highway 116, a County maintained roadway.

Significance Level: No Impact.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Comment:
According to the Safety Element of the General Plan, the project site is not located in a high wildland fire hazard area. The construction of new structures in accordance with current building standards would decrease the fire risk to structures on the project parcel. The County Fire Marshal's fire safe requirements require that new structures be installed with fire sprinklers with the intent to contain or prevent fires from spreading. In addition, standard conditions of approval include that the facility operator shall develop an emergency response plan consistent with Chapter 4 of the 2013 California Fire Code with safety plans, emergency procedures, and employee training programs; shall provide for safe access for emergency fire apparatus and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during an emergency; shall provide emergency water supply for fire protection available and accessible in locations, quantities and delivery rates as specified in the California Fire Code; and establish defensible space. All of the fire safe conditions of approval will ensure that the project would reduce the exposure of people and property to fire hazards to a degree the risk of injury or damage is less than significant. The project would not expose people to significant risk from wildland fires.

Significance Level:
Less than Significant Impact.

10. HYDROLOGY AND WATER QUALITY:

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Comment:
The project is located within the Forestville Water District and the "Urban Service Boundary" for the Forestville Water District Sewer Service Zone and will be subject to the Forestville Water District rules and regulations. Water quality standards or waste discharge requirements will not be violated and the project will not degrade surface or groundwater quality.

Significance Level: Less Than Significant Impact.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Comment:
Sonoma County Groundwater Maps in the Water Resource Element of the General Plan indicate that the project site is within a Zone 3 Groundwater Availability Area. However, the project will receive its water from the Forestville Water District and will not decrease groundwater supplies or interfere substantially with groundwater recharge. A large portion of the project site will remain undeveloped where the existing wetlands exist so groundwater recharge will not be impeded.

Significance Level: Less Than Significant Impact.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which

i. **would result in substantial erosion or siltation on- or off-site?**
ii. **substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
iii. **create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**
iv. **Impede or redirect flood flows?**

Comment:
The project will not significantly alter drainage patterns on-site or in the general area, nor will it result in on- or off-site flooding. The project does not include any work or alteration of a course of a stream or river. The project site is not classified as being within a 100-year flood plain. Standard project conditions of approval require that all grading and building permits receive review and approval by the Grading & Storm Water Section of the Permit and Resource Management Department prior to issuance. As part of the grading permit process, the applicant is required to submit a drainage report prepared by a civil engineer and demonstrate drainage improvements are designed in accordance with the Sonoma County Water Agency Flood Management Design Manual. Drainage improvements are required to maintain off-site natural drainage patterns, limit post-development storm water quantities and pollutant discharges in compliance with Permit Sonoma's best management practices guide and all other applicable regulations. Existing drainage patterns must be maintained, to the maximum extent practicable, to not adversely impact adjacent properties or drainage systems. Proposed drainage improvements shall not adversely impact adjacent properties or drainage systems

Significance Level: Less Than Significant Impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Comment:
The proposed project is not subject to seiche or tsunami. The project site is not located in an area subject to seiche or tsunami. Seiche is a wave in a lake triggered by an earthquake. Mudflow can be triggered by heavy rainfall, earthquakes or volcanic eruption. See discussion of landslide in 6.a.iv. above for areas with high potential for mudflow.

There are no blue line streams on the project site and the parcel is not in the 100-year flood zone or Special Flood hazard Area (SFHA) (*i.e.* the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year).

Significance Level: No Impact.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Comment:
The project is not located in a priority basin for the Sustainable Groundwater Management Act. A condition of approval requires that the project shall comply with all applicable regulations, monitoring, and fees associated with the Groundwater Sustainability Agency as applicable to the project site.

Significance Level: No Impact.

11. LAND USE AND PLANNING:

Would the project:

a) Physically divide an established community?

Comment:
The project would not physically divide a community. It does not involve construction of a physical structure (such as a major transportation facility) or removal of a primary access route (such as a road or bridge) that would impair mobility within an established community or between a community and outlying areas.

Significance Level: No impact.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Comment: The project includes a request for a General Plan Amendment from the LC (Limited Commercial) Land Use Designation to the PQP (Public and Quasi Public) Land Use Designation plus a Zone Change from PC (Planned Community) zoning district to the PF (Public Facilities) zoning district.

General Plan

The project proposal must be found consistent with the General Plan's Land Use Element and Public Facilities and Services Element Goals, Objectives, and Policies.

Land Use Element

Limited Commercial Areas Land Use Policy

Purpose and Definition. This category provides sites where commercial activities are limited. Particular limitations may be specified in the Land Use Policies for the Planning Areas. Limited commercial land is intended to accommodate retail sales and services for the daily self sufficiency of local rural or urban neighborhoods or communities in keeping with their character. This category is also intended to provide opportunities for a mix of residential and commercial use in Urban Service Areas and for consideration of a single family residence or Single Room Occupancy units in place of commercial uses allowed by zoning. Single Room Occupancy Units may only be considered in Urban Service Areas.

Park and recreation uses are not permitted uses under the Limited Commercial land use designation. Therefore, an amendment to the General Plan is required to change the land use designation to Public and Quasi Public.

Under the Land Use Element of the General Plan, there are several issues and goals related to park and recreation uses as follows:

The Public and Quasi Public Land Use Policy:

Purposes and Definition. This category provides sites that serve the community or public need and are owned or operated by government agencies, non-profit entities, or public utilities. However, public uses are also allowed in other land use categories. The Public Facilities and Services Element establishes policies for location of public uses in these other categories.

Permitted Uses. Uses include schools, places of religious worship, parks, libraries, governmental administration centers, fire stations, cemeteries, airports, hospitals, sewage treatment plants, waste disposal sites, etc.

Permitted Development Intensities and Designation Criteria. Designation of public/quasi public sites on the Land Use Plan shall be confined to the actual area of public/quasi public use. Amendments to add this designation must meet all of the following:

(1) Ownership or long term lease by a government agency, other non profit entity or public utility,
(2) Adequate road access,
(3) Lands are not suitable for and will not adversely affect resource production activities, and
(4) Any applicable Land Use Policies for the Planning Area.

The Public and Quasi Public land use designation has parks as a permitted use. The proposed project's request for an amendment to add this designation meets all of the required criteria. Forestville Planning Association (FPA) is a community non-profit organization. There is adequate road access directly off of Highway 116. Due to the wetlands on a large portion of the property site, lands are not suitable for and will not adversely affect resource production activities. The proposed project meets the applicable Land Use Policies associated with the Public Facilities and Services Element of the General Plan.

Public Facilities and Services Element

The proposed project is considered a Community Park per Section 3.1, Park and Recreation Services, of the Public Facilities and Services Element. Under the Public Facilities and Services Element of the General Plan, there are several goals and policies related to park and recreation uses as follows:

GOAL PF-2: Assure that park and recreation, public education, fire suppression and emergency medical, and solid waste services, and public utility sites are available to the meet future needs of Sonoma County residents.

Objective PF-2.1: Provide an adequate supply and equitable geographic distribution of regional and local parks and recreation services based on population projections.

*Policy PF-2a: Plan, design, and construct park and recreation, fire and emergency medical, public education, and solid waste services and public utilities in accordance with projected growth, except as provided in Policy LU-4d.**

Policy PF-2d: Provide community parks as needed in Urban Service Areas until the area incorporates, are annexed, or another service providing entity is established.

The existing use of the project site has demonstrated the need for a community park in downtown Forestville. There are a number of community events that are currently occurring at the undeveloped park site. They include Christmas Tree Lighting, School fund Raiser, Bike and Walk Fundraiser, Farmers Market, Business Exposition, and Skatespot Non-Profit Fundraiser, Typically, FPA holds 20 events per year in the Park, including the 16 Farmers' Markets.

Zoning Ordinance:

The Planned Community (PC) zoning district allows diverse mixes of uses, buildings, structures, lot sizes and open spaces while ensuring compliance with the general plan and protecting the public health, safety and general welfare. Parks and playgrounds are a conditional permitted use on parcels zoned PCCOM per Table 40-1, Allowed Uses in Special Purpose Zones, in Sec. 26-10-030 of the Zoning Code. These types of parks are associated with neighborhood parks.

The Public Facilities (PF) zoning district provides sites to serve the community or public need and to protect these sites from encroachment of incompatible uses. Parks and playgrounds are a conditional permitted use on parcels zoned PF per Table 40-1, These parks are associated with community parks. Therefore, rezoning the proposed project to PF would have the proposed use comply with that zoning

district.

The proposed project can be found consistent with the General Plan and Zoning Ordinance policies if the Land Use designation is changed to Public and Quasi Public and the zoning is changed to Public Facilities as requested.

Significance Level: Less Than Significant Impact.

12. MINERAL RESOURCES:

Would the project:

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

Comment:
The project site is not located within a known mineral resource deposit area (Sonoma County Aggregate Resources Management Plan, as amended 2010). Sonoma County has adopted the Aggregate Resources Management Plan that identifies aggregate resources of statewide or regional significance (areas classified as MRZ-2 by the State Geologist). Consult California Geologic Survey Special Report 205, Update of Mineral Land Classification: Aggregate Materials in the North San Francisco Bay Production-consumption region, Sonoma, Napa, Marin, and Southwestern Solano Counties, California (California Geolgocial Survey, 2013).

Significance Level: No Impact.

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

Comment:
The project site is not located within an area of locally-important mineral resource recovery site and the site is not zoned MR (Mineral Resources) (Sonoma County Aggregate Resources Management Plan, as amended 2010 and Sonoma County Zoning Code). No locally-important mineral resources are known to occur at the site.

Significance Level: No impact.

13. NOISE:

Would the project:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Comment:
The Noise Element of the Sonoma County General Plan establishes goals, objectives and policies including performance standards to regulate noise affecting residential and other sensitive receptors. The general plan sets separate standards for transportation noise and for noise from non-transportation land uses.

Sonoma County General Plan
The following policies from the Sonoma County Noise Element of the 2020 General Plan are

Applicable for use at the subject project;

Policy NE-1c: *Control non-transportation related noise from new projects. The total noise level resulting from new sources shall not exceed the standards in Table NE-2 of the recommended revised policies as measured at the exterior property line of any adjacent noise sensitive land use.*

Limit exceptions to the following:

(1) If the ambient noise level exceeds the standard in Table NE-2, adjust the standard to equal the ambient level, up to a maximum of 5dBA above the standard, provided that no measurable increase (i.e. +/- 1.5 dBA) shall be allowed.

(2) Reduce the applicable standards in Table NE-2 by five dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises, such as pile drivers and dog barking at kennels.

(3) Reduce the applicable standards in Table NE-2 by 5 decibels if the proposed use exceeds the ambient level by 10 or more decibels.

(4) For short-term noise sources, which are permitted to operate no more than six days per year, such as concerts or race events, the allowable noise exposures shown in Table NE-2 (following) may be increased by 5 dB. These events shall be subject to a noise management plan including provisions for maximum noise level limits, noise monitoring, complaint response and allowable hours of operation. The plan shall address potential cumulative noise impacts from all events in the area.

(5) Noise levels may be measured at the location of the outdoor activity area of the noise sensitive land use, instead of at the exterior property line of the adjacent noise sensitive use where:

(a) The property on which the noise sensitive use is located has already been substantially developed pursuant to its existing zoning, and

(b) There is available open land on these noise sensitive lands for noise attenuation. This exception may not be used for vacant properties, which are zoned to allow noise sensitive uses.

Table 3: General Plan Noise Element Table NE-2

Table NE-2: Maximum Allowable Noise Exposures for Non-transportation Sources

Hourly Noise Metric[1]	Maximum Exterior Noise Level Standards, dBA	
	Daytime: 7 AM to 10 PM	Nighttime: 10 PM to 7 AM
L_{50} (30 minutes in any hour)	50	45
L_{25} (15 minutes in any hour)	55	50
L_{08} (5 minutes in any hour)	60	55
L_{02} (1 minute in any hour)	65	60

[1] The sound level exceeded n% of the time in any hour. For example, the L_{50} is the value exceeded 50% of the time or 30 minutes in any hour; this is the median noise level. The L_{02} is the sound level exceeded 1 minute in any hour.

The Environmental Health Specialist of Project Review reviewed the project description and concluded a noise study was required due to close proximity of sensitive receptors to the project site.

Existing Noise Environment

An environmental noise assessment, Forestville Downtown Park, Sonoma County, CA was prepared for the project (Illingworth & Rodkin, Inc., February 2018). After completion of the noise assessment, the total area of the project site was reduced from 7.79 acres to 4.2 acres. Existing special events have successfully included amplified music and speech without receiving complaints from the existing residents living adjacent to the park. However, the County's NE-2 threshold would be exceeded during the use of amplified music and speech.

The Forestville Downtown Park, Sonoma County, CA Addendum Memorandum to the Environmental Noise Assessment (Illingworth & Rodkin, June 24, 2021) found that when the project-generated traffic was compared to the existing traffic volumes along SR 116, the daily and peak hour trips would be

insignificant and would not result in a measurable increase in traffic noise levels. Therefore, no additional impact would be generated. This would be a less-than-significant impact.

The parking lot would be located in the same location as existing conditions. The Addendum found since the parking lot location is going to remain in the same location, the distance from the parking lot to the eastern residences would be the same. Considering the existing parking lot noise is included existing ambient noise level conditions at the eastern residences, the new parking lot located in the same place would not change existing noise level conditions. With no change from the existing conditions of the parking lot, this would result in a less-than-significant impact.

Amplified music and speech is expected at most events but not all events. As shown in Table 4 from the environmental noise assessment, amplified music and speech are already included at existing activities, such as farmers' markets, tree lighting, etc. During events when amplified music and speech are expected, this noise source type would be the dominant noise source at the event. Amplified music and speech would represent the worst-case scenario.

Table 4: Information about Current and Anticipated Events at the Project Site

Event	Duration and Frequency	Maximum Expected Occupancy	Amplified Music/ Speech?	New or Current
Christmas Tree Lighting	1 to 2 hours, once a year in December	100 people	Yes	Current and Future
School Fundraiser	3 to 4 hours, once a year	75 to 100 people	Yes	Current and Future
School Field Trips	1 to 2 hours, four times a year	20 to 40 people	No	New
Bike and Walk Fundraiser	3 to 4 hours, once a year	75 to 100 people	Yes	Current and Future
Farmers' Market	3.5 hours, once a week for 16 weeks in the summer	100 to 150 people (total daily), 50 maximum at any given time	Yes	Current and Future
Business Exposition	4 hours, once a year	100 to 200 people (total daily per event)	Yes	Current and Future
Unknown – Flea Marks, Community events, etc.	1 to 4 hours, 1 to 4 times per year	Est. 50 to 100 people	Yes	New
Skatespot Non-profit Fundraiser	4 hours, once a year in April	Est. 150 people	Unknown	Current and Future
Forestville Downtown Oaks Park Fundraiser	4 to 6 hours, once a year	Est. 50 to 100 people	Yes	New

Amplified music and speech is expected only at the stage of the proposed amphitheater, located approximately 155 feet southwest of the nearest residential property line and approximately 325 south of the centerline of Highway 116. The stage would face northwest, away from the nearest residences. However, without mitigation, the noise assessment found that outdoor amplified music was expected to

exceed the County's NE-2 adjusted daytime noise limit of 49 dBA L50 by up to 5 dBA. Outdoor amplified speech would exceed the threshold by up to 4 dBA. Non-amplified music and typical conversations are not expected to exceed the County's daytime limit.

The amphitheater with a covered stage and a solid wall at the back of the stage aligning with the eastern side of the stage cover would provide shielding for the eastern residences. The most recent design of the sound wall is presented in Figure 4. Illingworth & Rodkin analyzed the most recent design for the amphitheater site plan and proposed sound wall and found that they satisfy their noise mitigation measure #3 provided in their Forestville Downtown Park Noise Addendum for Updated Project 6-24-2021. With that mitigation, amplified music and speech would meet the County's adjusted daytime threshold of 49 dBA L50, not exceed the NE-2 standards, and would be allowed to operate year round.

Table 5. Special Event Noise Levels, L50, for Noise Sources at the Stage of the Proposed Amphitheater

	L_{50} (Noise Level Exceeded 30 Minutes in any Hour), dBA
	Residences East of the Park (ST-2)
Unadjusted Table NE-2 Daytime Limit	50 dBA L_{50}
Daytime Ambient Noise Levels	54 dBA
Ambient Exceeds NE-2 Limit?	Yes
Daytime NE-2 Adjustment	+4
NE-2 Adjustment for speech and music	-5
Special Event Noise at Receptor Property Line	**Residences East of the Park (ST-2)**
Outdoor Amplified Music	44 to 54 dBA
Outdoor Amplified Speech	43 to 53 dBA
Outdoor Non-Amplified Music	45 to 48 dBA
Typical Conversation	40 to 42 dBA
Adjusted NE-2 Limits and Compliance	**Residences East of the Park (ST-2)**
Event Noises Exceed Ambient by 10 dBA?	No (all)
NE-2 Adjustment	+0 (all)
Adjusted Table NE-2 Daytime Limit	49 dBA L_{50}
Amplified Music Exceeds Adjusted NE-2?	Yes
Amplified Speech Exceeds Adjusted NE-2?	Yes
Non-Amplified Music Exceeds Adjusted NE-2?	No
Typical Conversation Exceeds Adjusted NE-2?	No

Significance Level: Potentially Significant Unless Mitigated

Mitigation Measure NOISE-1:

The applicant shall construct a sound wall around the edge of the stage. The stage should be enclosed with a solid wall at the rear of the stage and continuing at least 15 feet on either side of the stage. The northwest angle of the amphitheater shall be 15 degrees west, in conjunction with a wall along the back of the stage that is solid from ground to overhang to reduce noise levels at the adjacent residences to levels meeting the County's 49 dBA L50 threshold. The front of the stage shall remain open to the amphitheater seating area. Three-foot access doors can be installed into either side of the stage's wall-assembly for stage access purposes. The height of the walls shall be at least 6 feet from the floor of the stage. The wall

along the back of the stage shall be solid from ground to overhang, with no cracks or gaps, Implementation of this mitigation shall allow events with amplified music and speech to operate year round.

Mitigation Monitoring NOISE-1:
Final design, location, and orientation shall be dictated by findings in the noise study and compliance with County code shall be demonstrated by an onsite noise measurement, with results submitted to Permit Sonoma, prior to issuance of occupancy permit.

Mitigation Measure NOISE-2:
Noise generated from the event uses onsite shall comply with General Plan Noise Standards. If noise complaints are received from nearby residents, and they appear to be valid complaints in PRMD's opinion, then staff shall visit site to determine if the wall along the back of the stage has no cracks or gaps and/or whether improvements to the wall are required.

Mitigation Monitoring NOISE-2:
If noise complaints are received from nearby residents, and they appear to be valid complaints in PRMD's opinion, then staff shall visit site to determine if the wall along the back of the stage has no cracks or gaps and/or whether improvements to the wall are required. Appropriate action shall be taken to ensure that this Mitigation Measure is implemented to meet the NE-2 noise standards.

b) Generation of excessive ground borne vibration or ground borne noise levels?

Comment:
The project includes construction activities that may generate minor ground borne vibration and noise. These levels would not be significant because they would be short-term and temporary, and would be limited to daytime hours. There are no other activities or uses associated with the project that would expose persons to or generate excessive ground borne vibration or ground borne noise levels.

Significance Level:
Less than Significant Impact

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Comment: The site is not within an airport land use plan as designated by Sonoma County or within two miles of a public airport or public use airport.

Significance Level: No Impact.

14. POPULATION AND HOUSING:

Would the project:

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

Comment:
The project would not include construction of any homes, businesses or substantial amount of infrastructure and therefore would not induce substantial population growth.

Significance Level: No Impact.

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

Comment:
The project does not include the displacement of any existing housing or necessitate the construction of replacement housing elsewhere in the County.

Significance Level: No Impact.

15. PUBLIC SERVICES:

Would the project:

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

Comment:
The project will not increase residents or employees such that governmental services and/or facilities will have to be expanded. Generally, any potential impact the project may have on the provision of public services and or expansion of governmental facilities will be offset by development fees. Specifically:

i. Fire Protection: The County Fire Marshal requires that the Project comply with Fire Safe Standards, including fire protection methods such as sprinklers in buildings, alarm systems, extinguishers, vegetation management, hazardous materials management and management of flammable or combustible liquids and gases.

ii. Police: The Sonoma County Sheriff provides police protection services.

iii. Schools, parks, or other public facilities: The project will not generate additional students; nor will it significantly increase demand for park (see Comment 15.a) or other public facilities.

iv. Parks: See Comment 15.a.

v. Other public facilities: No other public facilities would be adversely impacted by this project.

Significance Level: Less Than Significant Impact.

16. RECREATION:

Would the project:

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

Comment:
The proposed project would not involve activities that would cause or accelerate substantial physical deterioration of parks or recreational facilities. The proposed project would improve the physical condition

of the existing unimproved community park property through the construction of the proposed improvements.

Significance Level: No Impact.

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

Comment:
The project includes the improvement of existing community park property that will not have an adverse physical effect on the environment. A large portion of the project site will include the preservation of wetlands.

Significance Level: No Impact.

17. TRANSPORTATION

Would the project:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Comment:
Three transportation-related plans have been adopted in Sonoma County: the Sonoma County General Plan 2020 Circulation Element, the Sonoma County Transportation Authority Comprehensive Transportation Plan (2009), and the Sonoma County Bikeways Plan. The project will not conflict with any of these plans.

The project is consistent with following General Plan Circulation and Transit Element Policies:

Policy CT-1j: Where practical, locate and design improvements and new circulation and transit facilities to minimize disruption of neighborhoods and communities, disturbance of biotic resource areas, destruction of trees, and noise impacts;

Policy CT-2s: Encourage measures that divert automobile commute trips to transit whenever possible, including:(1) Establishment of standards for site design to allow for transit access, bus turnouts and passenger shelters, sidewalks between transit stops and buildings, secure bicycle lockers and shower facilities, complementary street layouts and geometrics that accommodate buses and bicycles, exclusive bus lanes, land dedication for transit, and transportation kiosks for tenants of business and industrial parks;

Policy CT-2x: In unincorporated communities, provide for pedestrian, bicycle, and other alternative transportation mode connections among commercial, service, public (such as schools, libraries, etc.), and transit facilities where compatible with community character and consistent with the Vehicle Code;

Policy CT-3a: Use the adopted Sonoma County Bicycle and Pedestrian Plan (Bikeways Plan) as the detailed planning document for existing and proposed bikeways and pedestrian facilities.

Policy CT-3b: Use the policies of the Bikeways Plan whenever reviewing development projects to insure that projects are consistent with the Bikeways Plan and incorporate necessary bicycle and pedestrian improvements identified in the Bikeways Plan as a condition of project approval.

The Updated Focused Traffic Analysis for the Forestville Town Park Project (W-Trans, May 23, 2018) made the following findings:

- The Caltrans design plans for the Mirabel Road/Front Street roundabout require that access to the proposed park be limited at the project driveway to right turns in and out.
- Single-unit trucks can negotiate the turn into or out of the driveway, though the movement would require use of both lanes; because of the adequacy of sight lines, this is expected to result in acceptable operation.
- Sight distance to the west of the project driveway would be obscured by on-street parking. It is recommended that the proposed project be consistent with the Caltrans plan for right-turn access only; a right-turn only sign should be installed at the project driveway visible to outbound vehicles to reinforce that left turns are prohibited.
- It is recommended that parking to the west be restricted for the full distance between the bus pullout and the project driveway.
- It is recommended that parking be prohibited to the east of the project driveway to the adjacent driveway for the shopping center to improve the line of sight between vehicles approaching the Second Street/Front Street intersection and pedestrians entering the crosswalk.
- It is recommended that the tree on the northwest corner of the Second Street/Front Street intersection be removed or trimmed to improve sight lines between the project and Second Street as well as from Second Street to the west.

Coordination between the Sonoma County Public Infrastructure and the Applicant is occurring to ensure that any potential conflicts are resolved and recommendations that are agreed upon are incorporated into the project. This coordination is a condition of approval for the project. Additionally, Sonoma County Public Infrastructure provided conditions of approval for the project that require the applicant to obtain encroachment permits and dedicate a right-of-way along Front Street to accommodate the frontage improvements planned through the Forestville corridor.

Significance Level: Less Than Significant Impact

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) (evaluation of transportation impacts of land use projects using vehicle miles traveled)?

Comment:
Senate Bill (SB) 743 established a change in the metric to be applied for determining transportation impacts associated with development projects. Rather than using a Level of Service (LOS) analysis that uses delay-based criteria, the increase in Vehicle Miles Traveled (VMT) as a result of a project is now the basis for determining California Environmental Quality Act (CEQA) impacts with respect to transportation and traffic. The County of Sonoma has not yet established thresholds of significance related to VMT. Therefore, the project related VMT impacts were assessed based on guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory, 2018.

The OPR Technical Advisory identifies several criteria that may be used by jurisdictions to identify certain types of projects that are unlikely to have a VMT impact and can be "screened" from further VMT analysis. A screening criteria that pertains to small projects is one that OPR identifies as generating fewer than 110 new vehicle trips per day. The Updated Focused Traffic Analysis for the Forestville Town Park Project (W-Trans, May 23, 2018) found the proposed project is anticipated to generate an average of 93 daily trips which falls below the OPR threshold. Therefore, it is reasonable to conclude that the project can be presumed to have a less-than-significant impact on VMT.

Significance Level: Less Than Significant Impact.

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

Comment:
There are no substantially hazardous design features. The project has been conditioned to continue coordination with County Department of Transportation and Public Works (DTPW) with regards to the frontage improvements planned through the Forestville corridor (Forestville ATP)

Significance Level: Less Than Significant Impact.

d) Result in inadequate emergency access?

Comment:
In the Updated Focused traffic Analysis for the Forestville Town Park (W-Trans, 5-23-18), the AutoTURN application of AutoCAD was used to evaluate the adequacy of the proposed driveway for the largest vehicle expected to access the site, which is a single-unit commercial truck. Based on the review performed, trucks of this size and emergency vehicles of this size could turn right into and out of the project driveway. Access for emergency response vehicles is therefore expected to function acceptably. Two access exhibits, one simulating inbound access to the project site and the other simulating outbound access, are provided in the Updated Traffic Analysis.

Significance Level: Less than Significant impact.

f) Result in inadequate parking capacity?

Comment:
A parking lot is proposed at the front of the park with 1 ADA accessible van parking space and 16 9' by 18' parking spaces for a total of 17. The proposed parking lot was sized to minimize impact on the site and to accommodate the number of people currently using the park. In addition, a bike parking area for 24 bicycles is proposed along the existing West County Trail near Highway 116.

A Parking Analysis was prepared for the project and is included in the attached Technical Reports. Based upon the maximum number of guests for the existing and proposed events, 100 and 150 guests, the number of parking spaces required using the winery and tasting room calculation of 2.5 persons/vehicle, an event with 100 quests requires 40 parking spaces and an event with 150 guests requires 60 parking spaces.

Different assumptions were made in the Parking Analysis regarding off-site parking plus transit and bicycle use for a reduction in the requirement of on-site parking. The parking space demand of 60 parking spaces for the largest event will be reduced by

People riding bicycles	10
People taking the bus	2
Parking on American Wine Building property	6
On street parking on the opposite side of Highway 116 and on side streets	15
On street parking along Highway 116 frontage of adjacent properties	10
Subtotal - Available Off-site Parking	43 parking spaces
Subtotal – Available On-site Parking	17
Total Available Parking Spaces	60 parking spaces

The Parking Analysis concludes that there are enough parking spaces both on-site and off-site to meet the 60 parking space requirement for the largest events with 150 people.

Significance Level: Less than Significant Impact.

18. TRIBAL CULTURAL RESOURCES:

State Regulations

CEQA requires that a lead agency determine whether a project could have a significant effect on historical resources and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is one listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR, PRC Section 21084.1), a resource included in a local register of historical resources (PRC Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (PRC Section 15064.5[a][3]).

If a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and [c]).

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (*CEQA Guidelines* Section 15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion or eligibility for inclusion in the CRHR (*CEQA Guidelines* Section 15064.5[b][2][A]).

California Public Resources Code

Section 5097.5 of the California PRC states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

As used in this PRC section, "public lands" means lands owned by or under the jurisdiction of the State or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, local agencies are required to comply with PRC 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others.

Codes Governing Human Remains

The disposition of human remains is governed by Health and Safety Code Section 7050.5 and PRC sections 5097.94 and 5097.98 and falls within the jurisdiction of the Native American Heritage Commission (NAHC). If human remains are discovered, the county coroner must be notified within 48 hours, and there should be no further disturbance to the site where the remains were found. If the coroner determines the remains are Native American, the coroner is responsible to contact the NAHC within 24 hours. Pursuant to PRC Section 5097.98, the NAHC will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.

Would the project:

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site feature, place, cultural landscape that is

geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is: i) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5030.1(k); or ii) a resource determined by the lead agency. In its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Comment:
The Forestville Downtown Park project proposes a Use Permit with Design Review to construct a new public park with a picnic area, amphitheater (with sound barrier/backdrop), small plaza, pedestrian improvements, 24 bicycle parking spaces at West County Regional Trailhead, public restrooms, storage structure, drinking fountain, 17 vehicle spaces parking lot including one ADA accessible space, drainage improvements, sheltered bus stop, trash cans and enclosure, information kiosk, donor plaque displays, and oak and wetlands preservation areas. The project includes a request for a Zone Change from PC (Planned Community) zoning district to the PF (Public Facilities) zoning district and a General Plan Amendment from the LC (Limited Commercial) Land Use Designation to the PQP (Public and Quasi Public) Land Use Designation to allow the public park use. The property has been used as an unimproved public park and gathering space since 2014. Currently, there is an unimproved parking area accessed from Highway 116, a mulched area with picnic tables and trash cans, a seasonal wetland, open space land, and trailhead to the West County Regional Trail.

The project was originally submitted to Permit Sonoma in 2016. In accordance with Public Resources Code Section 21080.3.1 (Assembly Bill 52) a formal notification of the opportunity to consult on the project was sent to Native American Tribes within Sonoma County on May 12, 2017. One Tribe responded requesting that if the applicant discovers archaeological remains or resources during construction now or in the future, the applicant should immediately stop construction and notify the appropriate Federal Agency and the Tribe. Two Tribes requested a copy of an archeological survey for the project site and one Tribe requested a provision be incorporated into the project that states cultural monitoring may be required during construction. Permit Sonoma provided each Tribe with a copy of a 2007 cultural resources survey prepared by Tom Origer & Associates, which was prepared for a previous housing development project (File No. PLP07-0062). The previous development proposal expired in 2017 and no development occurred as a result of the project. Neither Tribe requested additional information on the Forestville Downtown Park project.

In 2021, the applicant revised the Forestville Downtown Park project to reconfigure park features to avoid a recently discovered wetland. In accordance with Assembly Bill 52, a formal notification of the opportunity to consult on this revised project was sent to Native American Tribes within Sonoma County on November 2, 2021. One Tribe responded by confirming no further consultation is requested and two Tribes stated the project is outside of their aboriginal territory.

Then, on April 12, 2022, Permit Sonoma sent an invitation to Tribes in Sonoma County to consult under Governmental Code Section 65352.3 (Senate Bill 18). Senate Bill 18 requires that local governments consult with California Native American Tribes during the preparation of General Plan Amendments for the purpose of preserving or mitigating impacts to places, features, and objects described in the Public Resources Code. One Tribe requested consultation within the 90-day period under Senate Bill 18. After meeting with the Tribe in 2022, Permit Sonoma requested the applicant update the original 2007 cultural resources study submitted for the project. The applicant submitted a study prepared by Tom Origer & Associates, dated October 7, 2022. The methods used to complete the cultural resources study included archival research at the Northwest Information Center (NWIC), examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the study area. No cultural resources were identified within the project site. Permit Sonoma staff met with Tribal representatives for consultation over a series of meetings and conducted one site inspection. Both parties determined there is a possibility for tribal cultural resources to be found on-site during construction of the park improvements. Therefore, the standard mitigation measure TCR-1 will be implemented to reduce the

potential impact to less than significant. This mitigation measure is also found in the project's conditions of approval.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation Measure Tribal Cultural Resources-1:
A Tribal Monitor from the Federated Indians of Graton Rancheria, or in the event a tribal monitor is not available, an archaeological monitor approved by the Federated Indians of Graton Rancheria shall be retained to be on site to monitor all project-related ground disturbing construction activities (i.e., grading, excavation, potholing, etc.) within previously undisturbed soils. In the event the Tribal Monitor identifies tribal cultural resources, the monitor shall be given the authority to temporarily halt construction in the immediate vicinity and within 50 feet of the discovery and to determine if it is a tribal cultural resource under CEQA in consultation with Permit Sonoma and, if necessary, the qualified archaeologist. Construction activities can continue in areas at least 50 feet away from the find and not associated with the cultural resource location. If the discovery proves to be significant, additional work such as testing or data recovery may be warranted. Any resources found should be treated with appropriate dignity and respect. At the completion of monitoring activities, all artifacts of Native American origin shall be returned to the culturally affiliated tribe through the tribal monitor.

Mitigation Monitoring Tribal Cultural Resources-1:
Prior to issuance of building or grading permits, the applicant shall provide appropriate agreements with the Federated Indians of Graton Rancheria, or if unavailable an archaeological firm accepted by the Federated Indians of Graton Rancheria to Permit Sonoma for review and approval. Mitigation Measure TCR-1 shall be listed as a note on all grading and building plan sheets submitted for permitting. Prior to final inspections and use permit certificate issuance the applicant shall provide documentation in writing including photos demonstrating that the mitigation was implemented during construction activities.

19. UTILITIES AND SERVICE SYSTEMS:

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Comment:
The Forestville Water District issued a letter on August 3, 2021 stating that the project is located within the boundary of the Forestville Water District (FWD) and the "Urban Service Boundary" for the Forestville Water District Sewer Service Zone. Therefore, subject to their rules and regulations, the project can be served by and adequate volume is available from the FWD existing water distribution system and sewer collection system.

Significance Level: No Impact.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Comment: See 9.a above

Significance Level: No Impact.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the

provider's existing commitments?

Comment: See 9.a above.

Significance Level: No Impact.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Comment:
The solid waste disposal needs at the existing park will continue to be met. Sonoma County has a solid waste management program in place that provides solid waste collection and disposal services for the entire County. The program can accommodate the permitted collection and disposal of the waste that will result from the proposed project.

Significance Level: No impact.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Comment:
There is no evidence that the existing park is not complying with all regulations to solid waste. The project will continue to comply with applicable solid waste management and reduction requirements.

Significance Level: No Impact.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire severity zones, would the project: 1) Substantially impair an adopted emergency response plan or emergency evacuation plan; 2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; 3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk of that may result in temporary or ongoing impacts to the environment; 4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Comment:
According to the Safety Element of the General Plan, the project site is not located in a high wildland fire hazard area.

The project is located in a Local Responsibility Area and is outside of the wildland high and very high fire hazard zones mapped by Wildland Fire Hazard Areas Figure PS 1-g of the Sonoma County General Plan 2020. The project is located in a relatively flat area and surrounded by the urban area of downtown Forestville, residences, and developed agricultural row crops. The County Fire Prevention Division conditioned the project to comply with the following design standards:

a. **Access roads**: minimum emergency access is required to provide safe access for emergency fire equipment and civilian evacuation concurrently, and to allow unobstructed traffic circulation during a wildfire or other emergency.
   i. Residential and Commercial Roads 20 feet in width required.
   ii. Driveways must have minimum 12 feet in width required.

b. **Premises Identification and Road Naming**: Approved road names & signs, address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road shall be provided.

c. **Gates**: Where gates or similar barriers are installed across access roads, an approved lock shall be installed as required by the fire code official.

d. **Water Supply**: An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises.

e. **Building Features**: Fire sprinklers and fire alarm system may be required based on existing and new use.

There is no separate emergency evacuation plan for the County. Furthermore, the project would not cause an interference with emergency evacuations. County Fire Prevention is requiring that the Owners and Operators provide a written "Fire Safety and Evacuation Plan" (as required by Section 403 and 404 of the California Fire Code) to Sonoma County Fire for approval. This includes but not limited to medial trained staff, fire watch, crowd managers. This plan shall be re-evaluated at any time when requested in writing by the fire code official.

Significance Level: Less Than Significant Impact.

21. MANDATORY FINDINGS OF SIGNIFICANCE

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

Comment:
According to the Open Space Map for Planning Area 4 of the General Plan, the project site is not designated with a BR (Biotic Resource) combining district. This means that there are not designated riparian corridors or critical habitat areas within the project site. There are no known special status species on or adjacent to the project site, and none listed on the State's Diversity Database. The project development does not include any work within a creek. The project would not disturb or place any fill of any wetland. The project would not substantially interfere with the movement of migratory fish or wildlife species.

Significance Level: Less than Significant Impact

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

Comment: Cumulative projects include development of a park including a restroom and storage building, a transit shelter, amphitheater with a stage and wetland preserve, with event activities in the project area. These projects have not resulted in any significant effects to which the project would make a cumulatively considerable contribution. As noted in this initial study, this project will not result in significant adverse impacts related to traffic congestion or safety. The project will not make a considerable contribution to any other significant cumulative impacts.

Significance Level: Less than Significant Impact

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

Comment: The project would not result in any significant changes to the existing environment. The proposed project will have a less than significant impact on vehicle miles traveled. Aesthetic and Noise mitigation measures have been incorporated into the project to reduce effects to surrounding neighbors in terms of exterior lighting and amplified sound. Based on the discussion and information provided in this initial study, the project environmental effects will not cause substantial adverse effects on human beings, either directly or indirectly.

Significance Level: Less than Significant Impact

References

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2. Assessor's Parcel Maps, County of Sonoma

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4. California Natural Diversity Database, California Department of Fish & Game, https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data

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21. Sonoma County Bikeways Plan, Sonoma County Permit and Resource Management Department, August 24, 2010.

22. Sonoma County Permit and Resource Management Department and Department of Transportation and Public Works Traffic Guidelines, 2014

23. Sonoma County Permit and Resource Management Department, Visual Assessment Guidelines, (no date)

24. Sonoma County Permit and Resource Management Department Noise Guidelines, 2017

25. Sonoma County Water Agency, Sonoma Valley Groundwater Management Plan, 2007 and annual reports. http://www.scwa.ca.gov/svgw-documents/

26. Sonoma County Water Agency, Santa Rosa Plain Groundwater Management Plan, 2014. http://www.water.ca.gov/groundwater/docs/GWMP/NC-5_SRP_SonomaCoWaterAgency_GWMP_2014.pdf

Technical Reports (Attached)

Att 1. LSA, Biological Resources Assessment, West County Trail Extension Project, Pajaro Lane to Highway 116, Forestville, Sonoma County, California, August 2018

Att 2. LSA, Request for Verification of a Jurisdictional Delineation of the West County Trail Extension Study Site, City of Forestville, Sonoma County, California, October 17, 2018

Att 3. W-Trans, Updated Focused Traffic Analysis for the Forestville Town Park Project, May 23, 2018

Att 4. Permit Sonoma, Forestville Downtown Park Parking Analysis, June 25, 2021

Att 5. Illingworth & Rodkin, Forestville Downtown Park, Sonoma County, CA, Addendum to the Environmental Noise Assessment, June 24, 2021

Tom Origer & Associates, A Cultural Resources Survey for the Forestville Square Project, Forestville, Sonoma, County, California, October 7, 2022 (This report is confidential and is not attached.)

BIOLOGICAL RESOURCES ASSESSMENT

WEST COUNTY TRAIL EXTENSION PROJECT
PAJARO LANE TO HIGHWAY 116

FORESTVILLE

SONOMA COUNTY, CALIFORNIA

LSA

August 2018

BIOLOGICAL RESOURCES ASSESSMENT

WEST COUNTY TRAIL EXTENSION PROJECT
PAJARO LANE TO HIGHWAY 116

FORESTVILLE

SONOMA COUNTY, CALIFORNIA

Submitted to:

Sonoma County Regional Parks Department
2300 County Center Drive, Suite 120A
Santa Rosa, California 95403

Prepared by:

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

Project No. SOG1402

LSA

August 2018

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FIGURES

TABLES

1.0 INTRODUCTION

This report presents the results of biological surveys conducted by LSA on the West County Trail Extension Project site. The site is located on Highway 116 in Forestville, and currently serves as the West County Regional Trail trailhead (Figures 1 and 2). The approximately 6-acre site includes Sonoma County Assessor's Parcel Numbers 083-270-001 and 083-270-002, and potentially sections of adjacent parcels.

This report describes survey methodologies, discusses survey results including vegetative communities and wildlife habitats present, special-status species potentially present, and the extent of regulated wetland features; discusses constraints to development; makes recommendations for additional biological resource surveys, and suggests mitigation measures for potential impacts to biological resources.

1.1 REGULATORY CONTEXT

The West County Trail Extension Project site is within the geographic range of several sensitive plant communities and special-status plant and animal species. It also contains other resources subject to the jurisdiction of state and federal regulatory agencies. These biological resources may fall under the agency jurisdictions and regulations listed below.

- The U.S. Fish and Wildlife Service (USFWS). Species listed as endangered, threatened or proposed under the federal Endangered Species Act (ESA) as well as species covered by the Eagle Protection Act and the Migratory Bird Treaty Act (MBTA).

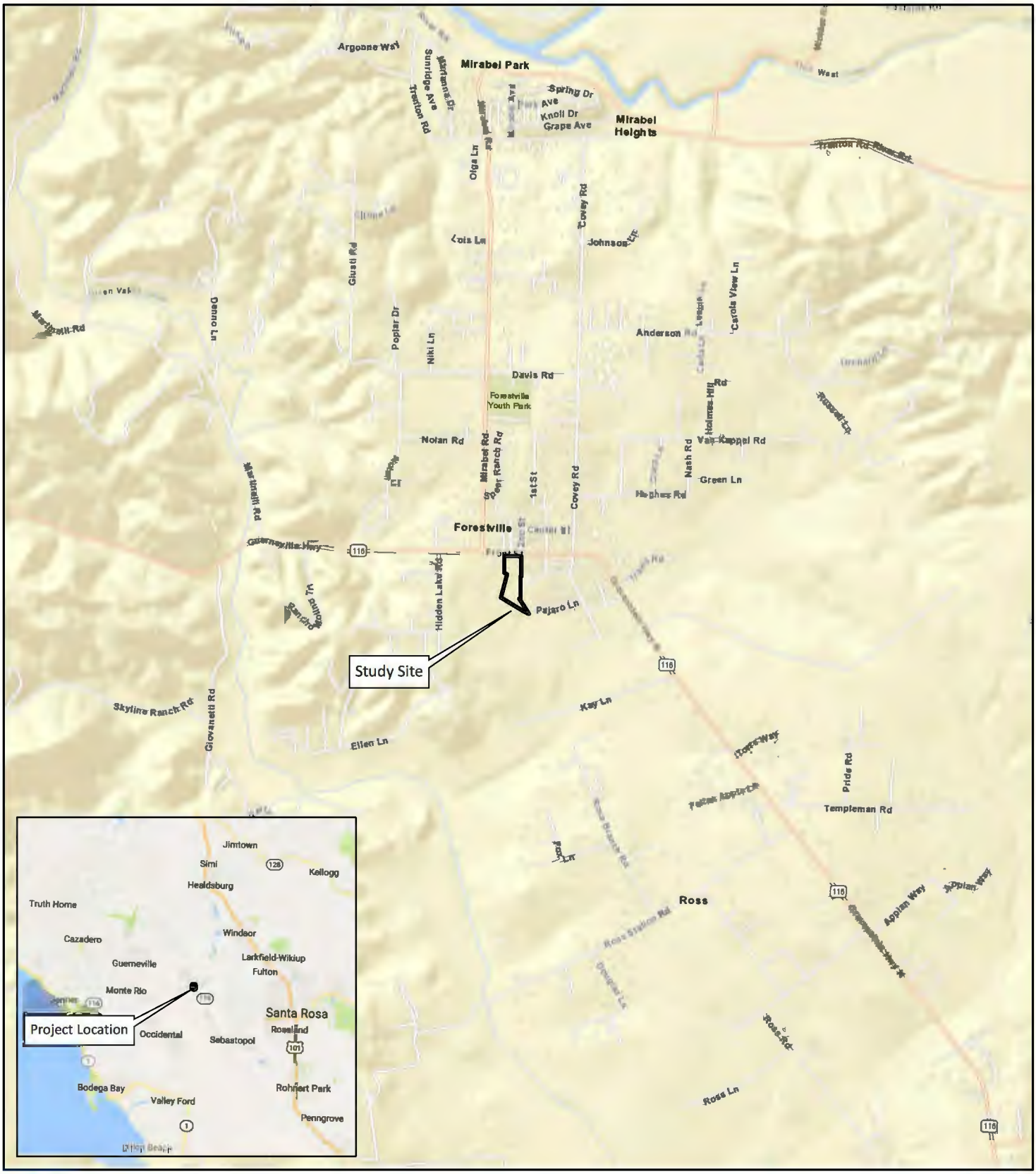
- California Department of Fish and Wildlife (CDFW). Species listed as endangered, threatened or rare (plants) under the State Endangered Species Act (CESA) as well as designated species of special concern and fully protected species. California Fish and Game Code protected active bird nests by most bird species. Issues Lake and Streambed Alteration Agreement for impacts to lakes, streams, and associated riparian habitat.

- California Environmental Quality Act (CEQA).

- U.S. Army Corps of Engineers (Corps). Fill of waters/wetlands subject to the jurisdiction of Section 404 of the Clean Water Act.

- Regional Water Quality Control Board (RWQCB). Water quality certification under Section 401 of the Clean Water Act; Porter-Cologne water quality standards.

- California Rare Plant Rank (CRPR). CRPR Lists 1A, 1B, and 2, used by CDFW in CEQA analysis.



LSA

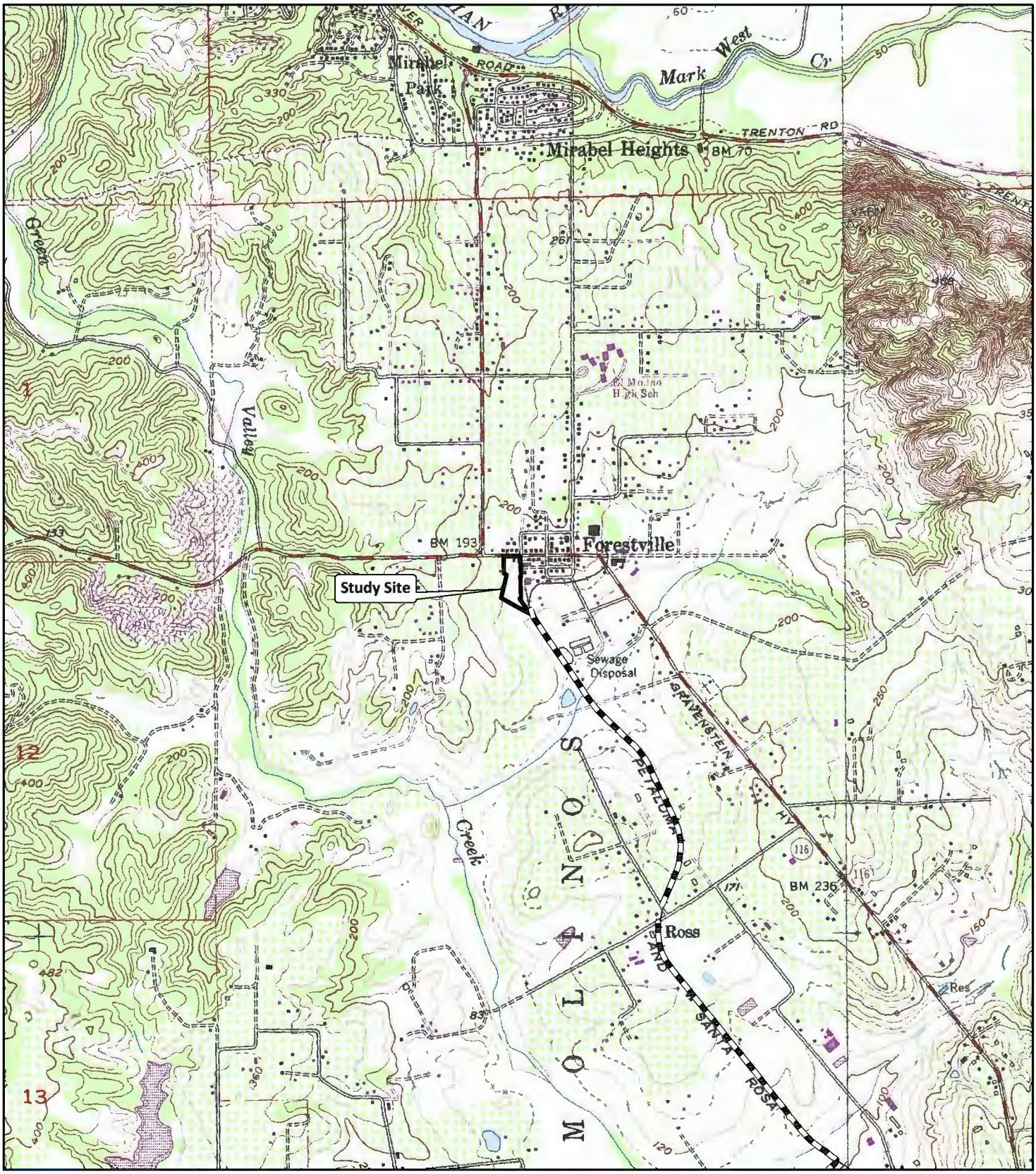
FIGURE 1

West County Trail Extension Project
Forestville, Sonoma County, California

Regional Location

SOURCE: ESRI World Basemap, Google Streets.

I:\SOG1402\GIS\Maps\Figure 1_Regional Location.mxd (8/9/2018)



LSA

FIGURE 2

LEGEND

Study Site

West County Trail

N

0 1000 2000

FEET

West County Trail Extension Project
Forestville, Sonoma County, California

Site Location

SOURCE: 7.5-minute Quads: *Camp Meeker, Calif.* (1971), *Sebastapol, Calif.* (1980)

I:\SOG1402\GIS\Maps\Figure 2_Site Location.mxd (8/9/2018)

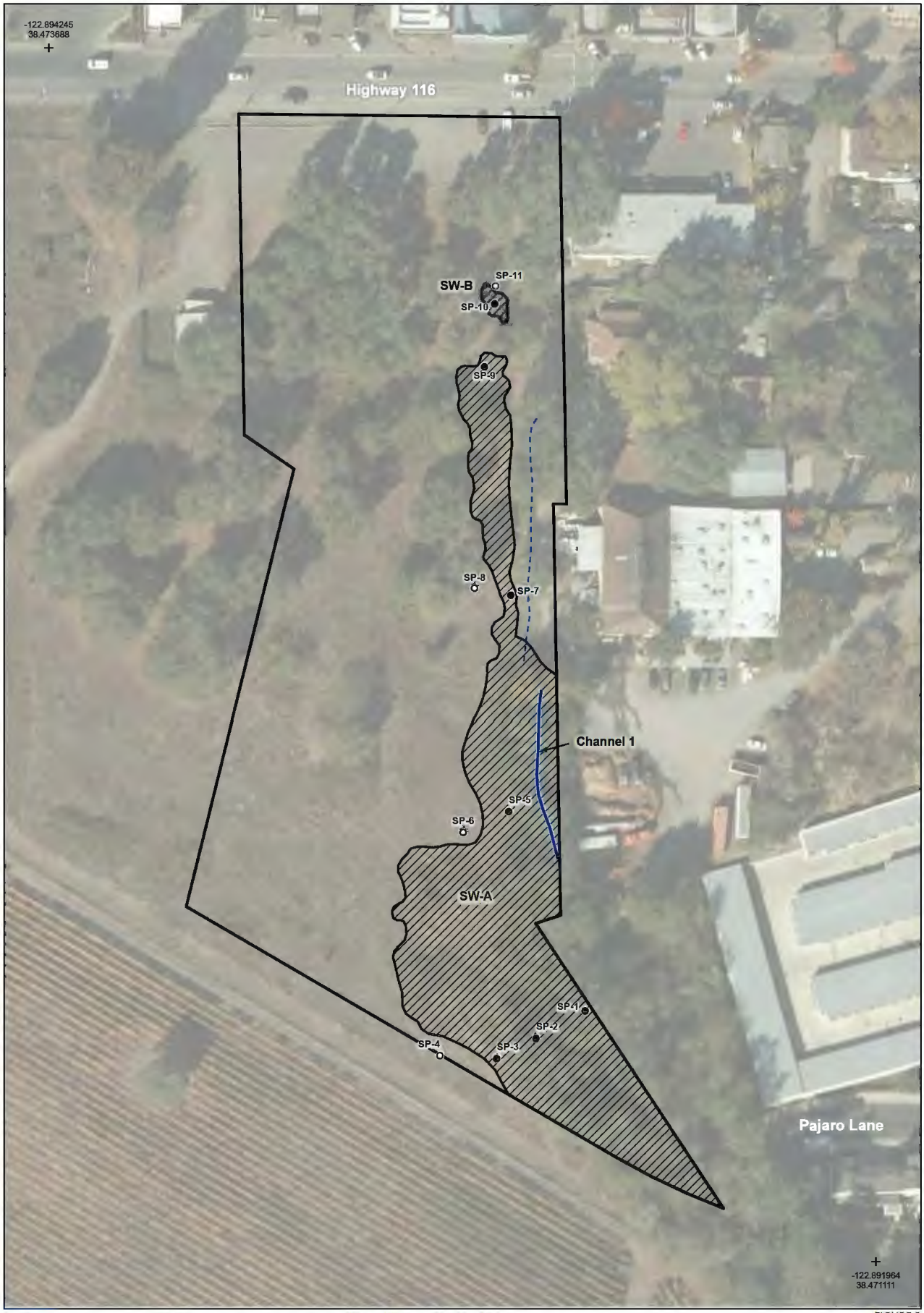
2.0 METHODS

Prior to the field visits, LSA biologists searched the CDFW's *California Natural Diversity Data Base* (CNDDB) and the California Native Plant Society's (CNPS's) *Electronic Inventory of Rare and Endangered Vascular Plants of California* for records of special-status species or habitat in the project vicinity. Additionally, LSA reviewed the Habitat Site Assessment for the Crinella Vineyard Installation and Housing Development Project (WRA 2003). The Habitat Site Assessment for the Crinella site includes the West County Trail Extension Project site in addition to large areas south and west of the site. Therefore, many significant elements discussed in the Crinella Habitat Site Assessment are not applicable to the West County Trail Extension Project site.

On March 16, 2018, LSA Senior Biologist/Wetland Specialist Bernhard Warzecha surveyed the study site to assess habitat for special-status species and sensitive habitats. Wildlife, wildlife sign, and plant species observed during the survey were documented in field notes. Additionally, potential aquatic resources subject to regulation by the Corps, RWQCB, and/or CDFW, including stream channels, riparian corridors, and seasonal wetlands, were documented and mapped (Figure 3).

LSA senior soil scientist Chip Bouril investigated the study site on June 7, 2018. Potential jurisdictional boundaries were mapped using a global positioning system (GPS) receiver with sub-meter accuracy. Boundaries were determined by following a combination of the limits of hydrophytic vegetation, the limits of observed redoximorphic mottling and wetland hydrology indicators, and topographic breaks. LSA established 11 wetland Sample Points on the study site. All data from the 11 Sample Points were recorded on standard wetland determination data forms.

On May 30, and July 20, 2018, LSA Senior Botanist Tim Milliken conducted focused rare plant surveys along the trail alignment. The surveys were conducted to coincide with the blooming periods of the special-status plants that had the potential to occur along the trail alignment.



LSA

LEGEND

- Study Site
- Wetland Sample Point
- Non-wetland Sample Point
- Non-jurisdictional Ditch

Potential Waters of the United States

Wetlands

- Seasonal Wetland

Other Waters

- Channel

1 INCH = 70 FEET

0 35 70

FEET

SOURCE: Sonoma County Regional Parks (04/208); Esri World Imagery.

I:\SOG1402\GIS\Maps\Delineation\Figure 3_Potential Waters of the US.mxd (8/9/2018)

FIGURE 3

West County Trail Exponsion Project

Potential Waters of the United States

3.0 RESULTS

3.1 LAND COVER TYPES

The site includes land cover types best categorized as landscaped/disturbed annual grassland, blackberry thickets (non-riparian), riparian, oak woodland, and stream channel/wetland.

3.1.1 Landscaped/Disturbed Annual Grassland

This plant community is the most prevalent land cover type at the study site and is dominated by species typical of regularly mowed and otherwise disturbed non-native annual grassland. Dominant species include common non-native annual grasses and forbs such as wild oats (*Avena fatua*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*B. hordeaceous*), and vetch (*Vicia* sp.); Additionally, an array of non-native invasive or ruderal herbaceous plants were observed, including prickly ox-tongue (*Helminthotheca echioides*), sweet fennel (*Foeniculum vulgare*), poison hemlock (*Conium maculatum*), curly dock (*Rumex crispus*), velvet grass (*Holcus lanatus*), vetch (*Vicia villosa*) bur clover (*Medicago polymorpha*), and English plantain (*Plantago lanceolata*). Several patches of dense non-native Himalayan blackberry (*Rubus armeniacus*) are present within the disturbed non-native annual grasslands.

3.1.2 Riparian (Including Fringe Wetlands)

Riparian habitat on site is located on both sides of the open creek channel within the study site (Figure 3). This habitat includes tall mature valley oaks (*Quercus lobata*), arroyo willow (*Salix lasiolepis*), California bay laurel (*Umbellularia californica*); shrubs, including Himalayan blackberry, California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), California rose (*Rosa californica*); and small patches of herbaceous wetland plants along the fringes of the riparian woody canopy. Small patches of herbaceous wetland plants include rush (*Juncus* sp.), white-root sedge (*Carex barbarae*), umbrella sedge (*Cyperus eragrostis*), and hyssop loosestrife (*Lythrum hyssopifolia*).

3.1.3 Oak Woodland

Mature Oregon oaks (*Quercus garryana*) and black oaks (*Q. kelloggii*) are scattered throughout the site.

3.1.4 Stream Channel/Wetland

A potentially jurisdictional open stream channel, roadside ditch, ephemeral erosional feature, and marginal seep/seasonal wetland are located within the study site (Figure 3).

3.1.5 Soils

Study site soils are mapped as Goldridge fine sandy loam, 2 to 9 percent slopes (Web Soil Survey 2018). The undisturbed surface soil horizons observed did match those described for the Goldridge soil. Road base gravels observed on portions of the site may be associated with former roadways or a former railroad grade. The Goldridge series description only lists any mottling below a depth of 28 inches.

3.2 SPECIAL-STATUS PLANTS

The CNDDB search resulted in occurrence records for 32 species of special-status plants in the 5-mile vicinity of the study site (CDFW 2018). Following LSA's reconnaissance-level survey, the potential for these species to occur within the study site was assessed based on the habitats present, the proximity of known species occurrences, and knowledge of the species' range (Table A). Ten of the plant species are unlikely to occur on the site due to the extent of disturbance, and/or the lack of suitable habitat (i.e., closed-cone coniferous forest, north coast coniferous forest, coastal prairie, chaparral, naturally occurring lakes and streams, vernal pools, alkaline areas, and serpentine soils). Twenty-one of the species have a low potential to occur due to the presence of disturbed, but potentially suitable grassland and riparian/wetland habitat. One species has a moderate potential to occur; this species is discussed in greater detail below.

3.3 WILDLIFE

The study site provides habitat for several wildlife species, including amphibians, reptiles, birds, and mammals. Wildlife or wildlife sign observed during LSA's survey consist of turkey vulture (*Cathartes aura*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), California towhee (*Melozone crissalis*), California scrub-jay (*Aphelocoma californica*), house sparrow (*Passer domesticus*), Botta's pocket gopher (*Thomomys bottae*) burrows, and dusky-footed woodrat (*Neotoma fuscipes monochroura*) houses.

3.4 SPECIAL-STATUS WILDLIFE

From the results of the literature and database review, LSA developed a list of special-status wildlife species to be evaluated for the project (Table A). Following LSA's reconnaissance-level survey, the potential for these species to occur within the study site was assessed based on the habitats present within and adjacent to the study site, the proximity of known species occurrences, and knowledge of the species' range and/or mobility. Five of the special-status wildlife species evaluated are not likely to occur on the study site due to the absence of suitable habitat caused by the extent of disturbance, the site's prior use of as a landscaped backyard, and the lack of suitable habitat in the vicinity of the site. One of the species, the pallid bat (*Antrozous pallidus*), has a low potential to occur due to potential suitable habitat present (Table A).

Table A: Special-Status Species Evaluated

Species Name	Habitat	Federal Status	State Status	Rare Plant Rank*	Potential to Occur
Alopecurus aequalis var. *sonomensis* Sonoma alopecurus	Marshes and swamps (freshwater), Riparian scrub	Endangered	None	1B	Not observed during focused plant surveys.
Arctostaphylos bakeri ssp. *bakeri* Baker's manzanita	Broadleaved upland forest, Chaparral	None	Rare	1B	No suitable habitat present.
Arctostaphylos densiflora Vine Hill manzanita	Chaparral (acid marine sand)	None	Endangered	1B	No suitable habitat present.
Arctostaphylos stanfordiana ssp. *decumbens* Rincon Ridge manzanita	Chaparral, restricted to red rhyolites in Sonoma County	None	None	1B	No suitable habitat present.
Calamagrostis crassiglumis Thurber's reed grass	Bogs and fens, Broadleaved upland forest, Closed-cone coniferous forest, Coastal scrub, Meadows and seeps (mesic), Marshes and swamps (freshwater), North Coast coniferous forest	None	None	2B	Not observed during focused plant surveys.
Campanula californica swamp harebell	Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, marshes and swamps (freshwater), North Coast coniferous forest/mesic	None	None	1B	Not observed during focused plant surveys.
Carex comosa bristly sedge	Coastal prairie, marshes and swamps (lake margins), valley and foothill grassland	None	None	2B	Not observed during focused plant surveys.
Castilleja uliginosa Pitkin Marsh paintbrush	Marshes and swamps (freshwater)	None	Endangered	1A	Not observed during focused plant surveys.
Ceanothus confusus Rincon Ridge ceanothus	Chaparral	None	None	1B	No suitable habitat present.
Ceanothus foliosus var. *vineatus* Vine Hill ceanothus	Chaparral	None	None	1B	No suitable habitat present.
Ceanothus purpureus holly-leaved ceanothus	Chaparral	None	None	1B	No suitable habitat present.
Chorizanthe valida Sonoma spineflower	Coastal prairie	Endangered	Endangered	1B	No suitable habitat present.
Clarkia imbricata Vine Hill clarkia	Acidic sandy loam, Chaparral, Valley and foothill grassland	Endangered	Endangered	1B	Not observed during focused plant surveys.
Cordylanthus tenuis ssp. *capillaris* Pennell's bird's-beak	Closed-cone coniferous forest, Chaparral	Endangered	Rare	1B	No suitable habitat present.

Species Name	Habitat	Federal Status	State Status	Rare Plant Rank*	Potential to Occur
Cuscuta obtusiflora var. *glandulosa* Peruvian dodder	Marshes and swamps (freshwater)	None	None	2B	Not observed during focused plant surveys.
Delphinium luteum golden larkspur	Broadleaved upland forest, Coastal scrub, Valley and foothill grassland	Endangered	Rare	1B	Not observed during focused plant surveys.
Erigeron greenei Greene's narrow-leaved daisy	Broadleaved upland forest, Cismontane woodland, North Coast coniferous forest	None	None	1B	No suitable habitat present.
Erigeron serpentinus serpentine daisy	Chaparral (serpentinite or volcanic)	None	None	1B	No suitable habitat present.
Fritillaria liliacea fragrant fritillary	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland	None	None	1B	Not observed during focused plant surveys.
Hemizonia congesta ssp. *congesta* congested-headed hayfield tarplant	Valley and foothill grassland	None	None	1B	Not observed during focused plant surveys.
Horkelia tenuiloba thin-lobed horkelia	Broadleaved upland forest, Chaparral, Valley and foothill grassland	None	None	1B	Not observed during focused plant surveys.
Lasthenia californica ssp. *bakeri* Baker's goldfields	Closed-cone coniferous forest (openings), coastal scrub, meadows and seeps, marshes and swamps	None	None	1B	Not observed during focused plant surveys.
Lessingia arachnoidea Crystal Springs lessingia	Cismontane woodland, Coastal scrub, Valley and foothill grassland	None	None	1B	Not observed during focused plant surveys.
Lilium pardalinum ssp. *pitkinense* Pitkin Marsh lily	Cismontane woodland, meadows and seeps, marshes and swamps, mesic and sandy	Endangered	Endangered	1B	Not observed during focused plant surveys.
Limnanthes vinculans Sebastopol meadowfoam	Meadows and seeps, Valley and foothill grassland, Vernal pools	Endangered	Endangered	1B	Not observed during focused plant surveys.
Navarretia leucocephala ssp. *bakeri* Baker's navarretia	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools/mesic	None	None	1B	Not observed during focused plant surveys.
Rhynchospora alba white beaked-rush	Freshwater-marsh, bogs and fens	None	None	2B	Not observed during focused plant surveys.
Rhynchospora californica California beaked-rush	Bogs and fens, lower montane coniferous forest, meadows and seeps, marshes and swamps	None	None	1B	Not observed during focused plant surveys.
Rhynchospora capitellata brownish beaked-rush	Bogs and fens, lower montane coniferous forest, meadows and seeps, marshes and swamps	None	None	2B	Not observed during focused plant surveys.

Species Name	Habitat	Federal Status	State Status	Rare Plant Rank*	Potential to Occur
Rhynchospora globularis round-headed beaked-rush	Marshes and swamps	None	None	2B	Not observed during focused plant surveys.
Trifolium amoenum two-fork clover	Coastal bluff scrub, Valley and foothill grassland (sometimes serpentinite)	Endangered	None	1B	Not observed during focused plant surveys.
Trifolium hydrophilum saline clover	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools	None	None	1B	Not observed during focused plant surveys.
Mammals					
Antrozous pallidus pallid bat	Occupies a variety of habitats at low elevation including grasslands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting	None	Species of Special Concern	--	Roost sites documented nearby in the 1950s. Tree hollows may provide roosting habitat.
Corynorhinus townsendii Townsend's big-eared bat	Forages in a variety of habitats; prefers mesic sites. Roosts in caves, mines, tunnels and buildings	None	Species of Special Concern	--	No roosting habitat present.
Birds					
Agelaius tricolor tricolored blackbird	Scattered breeding locations in Sonoma County. Found among red-winged blackbird colonies. Nests in tall freshwater emergent marsh or weedy vegetation, brambles. Requires large foraging areas	None	Candidate Endangered	--	No nesting habitat present
Fish					
Oncorhynchus kisutch pop. 4 coho salmon - central California coast ESU	Coastal streams; require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen	Endangered	Endangered	--	No suitable stream habitat present on site. Habitat present downstream of site
Amphibians					
Rana boylii foothill yellow-legged frog	Found in or near rocky streams in a variety of habitats. Feed on both aquatic and terrestrial invertebrates	None	Candidate Threatened	--	No suitable stream habitat with rocky substrate present.
Invertebrates					
Syncaris pacifica California freshwater shrimp	Found in low-elevation, low gradient perennial freshwater streams in Sonoma, Marin and Napa Counties where banks are structurally diverse with undercut banks, exposed roots, or overhanging woody debris or vegetation	Endangered	Endangered	--	No perennial freshwater stream present.

* California Rare Plant Rank 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
California Rare Plant Rank 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
California Rare Plant Rank 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3.5 POTENTIALLY JURISDICTIONAL WETLANDS/WATERS

Wetland/water features under the potential jurisdiction of the Corps, RWQCB, and/or CDFW include an open stream channel and two wetlands. This open creek channel is supplied by the outlet of a concrete culvert of the stormwater drainage system, a roadside ditch, and an ephemeral erosional feature just north of the open creek channel.

The riparian canopy, regulated by CDFW under their Lake and Streambed Alteration Agreement Program and sometimes the RWQCB, extends along both sides of the open stream channel and includes approximately woody and fringe wetland vegetation described under Section 3.1.2 above.

LSA has determined that the potential Section 404 waters of the United States on the West County Trail Extension Study Site are two seasonal wetland polygons with a total area of 1.028 acres and an Other Waters of the United States channel with an area of 0.012 acre, for a total potential jurisdictional area of 1.040 acres. The two wetlands and the channel are described below in Sections 3.5.1 and 3.5.2. These potential jurisdictional features and study site boundaries are mapped on Figure 3.

3.5.1 Wetlands

A south-draining swale containing hydrophytic vegetation is located in the eastern portion of the study site. The northern portion of the study site and swale is a mowed "lawn" portion of the public park. The southern portion of the swale is a mature riparian tree canopy with a mostly impenetrable thicket of Himalayan blackberry understory.

The hydrophytic vegetation in the northern portion of the swale is limited to a relatively narrow area within the study site boundary, while the southern and riparian forest portion of the swale is much wider and extends to and slightly beyond the eastern edge of the study area. This wetland feature is mapped as Seasonal Wetland A (Figure 3), with a potential jurisdictional area of 44,435 square feet (1.020 acres).

Seasonal Wetland B (Figure 3) is located in a separate patch of strongly hydrophytic vegetation and strong hydric soil indicators that was surrounded by non-hydrophytic vegetation and has a potential jurisdictional area of 380 square feet (0.008 acre).

3.5.2 Other Waters of the United States

An engineer-surveyed underground storm drain runs underneath a graveled roadway from Front Street south to an outlet inside the Seasonal Wetland A riparian forest and feeds a channel that is within the study site for a distance of approximately 135 linear feet before exiting the study site boundary. (This feature roughly parallels the eastern side of the study site to its southern tip.) The likely excavated channel has an un-vegetated bed, a steep cut bank, and shows evidence of scour and sediment transport. Most of the channel is inaccessible because of the blackberry thicket, but accessed portions have a 4-foot wide Ordinary High Water Mark. The channel bed was damp where observed. This feature is mapped as Channel 1 (Figure 3), with a potentially jurisdictional length of 135 feet and potentially jurisdictional area of 540 square feet (0.012 acre) within the study site. Channel 1 is completely within the mapped area of Seasonal Wetland A.

3.5.3 Other Areas Investigated

The underground storm drain appears to have been constructed in uplands, conveys non-jurisdictional urban storm runoff, and is therefore determined to be non-jurisdictional.

An excavated ditch runs southward along the edge of the graveled road within the eastern portion of the northern study site and disappears into the blackberry thicket. This ditch contains sediment deposits eroded from the gravel road. This ditch is interpreted as being non-jurisdictional because it appears to have been constructed in uplands, appears to be ephemeral, and has no wetland characteristics. This ditch may supply some of the sediments observed in Channel 1.

4.0 POTENTIAL IMPACTS

The proposed project could have the following impacts to biological resources:

- If project activities result in fill of jurisdictional waters or wetlands on the study site (Figure 3), the project proponent would need to obtain the appropriate Clean Water Act Section 404 and 401 permits from the Corps and RWQCB. Conditions of the permits including avoidance, minimization, and compensation measures would become part of the project. The project may need to provide mitigation, including the creation and/or enhancements to seasonal wetlands and the channel. The regulatory agencies may require the creation of in-kind habitat at a ratio of 1:1 or more, depending on the impacts.

- If fill of the creek channel and/or associated riparian vegetation are proposed, a CDFW Streambed Alteration Agreement, Corps permit, and RWQCB Water Quality Certification will need to be obtained prior to initiation of the project. Conditions of the permits including avoidance, minimization, and compensation measures would become part of the project.

- Future project activities may impact special-status species, nesting birds, and roosting bats as discussed in Section 3, if present.

5.0 RECOMMENDATIONS

1. Preconstruction surveys for nesting birds and roosting pallid bats should be conducted prior to any construction activities. If birds are observed nesting, appropriate buffers around active bird nests will need to be established until the young have fledged or the nest is no longer active. The size of the buffer will depend on the species and the nest location. If roosting pallid bats are observed, appropriate buffers around roost sites should be established.

2. If trees are proposed to be impacted, an arborist report should be prepared. Depending on the characteristics and status of the trees to be removed, a tree removal permit may be required from Sonoma County. Protected trees will likely need to be mitigated at a minimum 1:1 ratio.

6.0 REFERENCES

California Department of Fish and Wildlife (CDFW). 2018. California Natural Diversity Database (CNDDB), commercial version. Biogeographic Data Branch California, Department of Fish and Wildlife, Sacramento, CA. Accessed March 1, 2018.

California Native Plant Society (CNPS). 2018. The Online CNPS Inventory of Rare and Endangered Plants (8th Edition). CNPS. Accessed March 1, 2018.

Wetlands Research Associates, Inc. (WRA). 2003. Habitat Site Assessment for the Crinella Vineyard Installation and Housing Development Project, Forestville, California.

LSA

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FRESNO
IRVINE
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PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

October 17, 2018

Holly Costa
North Branch Chief
U.S. Army Corps of Engineers
1455 Market Street, 16th Floor
San Francisco, CA 94103-1398

Subject: Request for Verification of a Jurisdictional Delineation of the West County Trail Extension Study Site, City of Forestville, Sonoma County, California

Dear Holly:

On behalf of Sonoma County Regional Parks Department, LSA is requesting verification of the extent of U.S. Army Corps of Engineers (Corps) jurisdiction under Section 404 of the Clean Water Act on the West County Trail Extension Study Site.

STUDY SITE DESCRIPTION

The approximately 4.26-acre study site comprises of Sonoma County Assessor's Parcel Numbers 083-270-001 and 083-270-002. The study site is located adjacent to the southern side of Front Street (State Hwy 116) just west of Second Street and a block east of Mirabel Road in downtown Forestville, approximately 6 miles west-northwest of downtown Sebastopol (Figures 1 and 2; all figures attached at end of report).

The study site is located in the northwest quarter of Section 7, T7N, R9W, located on the Camp Meeker, California, 7.5-minute series USGS quadrangle, and centered at approximately 122.893° West and 38.472° North. The study site is vegetated with a mix of ruderal grassland, trees, and riparian forest. The northern portion of the study site is maintained parkland, and the southern portion of the site has an informal trail and dense blackberry riparian forest. No structures are present on the study site. The study site elevations range from approximately 150 to 165 feet above mean sea level. The western portion of the study site slopes moderately to the southeast toward a south draining swale which leads off site toward a tributary of Green Valley Creek.

Surrounding land uses are ruderal grassland and vineyard to the west and south, commercial to the east, and urban commercial to the north. The study site is accessed from the public park parking lot along the southern side of Front Street.

Vegetation

The northern half of the study site contains mostly mature valley oaks (*Quercus lobata*) surrounded by mowed ruderal grasses or thick wood chips. The southern half of the study site has similar trees and un-mowed grasses on the slope to the west and a Himalayan blackberry/willow/valley oak wooded riparian area along a shallow swale to the east. Grasses along the slope include wild oats (*Avena* sp.), Italian rye (*Festuca perennis*), soft chess (*Bromus hordeaceus*), and velvet grass (*Holcus lanatus*). Forbs include vetch (*Vicia villosa*) and bur clover (*Medicago polymorpha*). Riparian area species include Himalayan blackberry (*Rubus armeniacus*), poison oak (*Toxicodendron*

diversalobum), California rose (*Rosa californica*), white-root sedge (*Carex barbarae*), arroyo willow (*Salix lasiolepis*), California bay laurel (*Umbellularia californica*), and valley oak.

Soils

Study site soils are mapped as Goldridge fine sandy loam, 2 to 9 percent slopes (Web Soil Survey, https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed May 24, 2018). The undisturbed surface soil horizons observed did match those described for the Goldridge soil. Road base gravels observed on portions of the site may be associated with former roadways or a former railroad grade. The Goldridge series description only lists any mottling below a depth of 28 inches.

Hydrology

The western portion of the study site generally drains southeastward to a south-draining swale in the eastern portion of the site. In March 2018, albeit immediately after a rainstorm, surface water was observed running southward along this swale. Ephemeral runoff was likely a dominant source, but a secondary source may be seasonal seepage surfacing through the porous soil along the swale.

A roadway along the eastern edge of the site drains southward in a constructed ditch which leads into a blackberry thicket. Surveyor mapping shows an underground storm drain leading from Front Street to an outlet in the blackberry thicket into a channel that drains south-southeastward off the study site.

Drainage from the site's swale and channel flows southwestward for approximately ¼ mile to an un-named blue-line tributary that joins Green Valley Creek approximately 3/5 mile southwest of the study site. Green Valley Creek flows northward to the Russian River, a traditional navigable water of the United States, approximately 2-1/3 miles north-northwest of the study site.

REGULATORY BACKGROUND

Clean Water Act Jurisdiction

The Corps is responsible under Section 404 of the Clean Water Act (CWA) to regulate the discharge of fill material into waters of the United States. Waters of the United States and their lateral limits are defined in 33 CFR Part 328.3 (a) and include streams that are tributaries to navigable waters and their adjacent wetlands. The lateral limits of jurisdiction for a non-tidal stream are measured at the line of the Ordinary High Water Mark (OHWM) or the limit of adjacent wetlands. Any permanent extension of the limits of an existing water of the United States, whether natural or manmade, results in a similar extension of Corps jurisdiction.

Waters of the United States fall into two categories: wetlands and non-wetland waters. Wetlands include marshes, meadows, seep areas, floodplains, basins, and other areas experiencing extended seasonal soil saturation and dominated by wetland plant cover. Non-wetland waters include water bodies and watercourses such as rivers, streams, lakes, springs, ponds, coastal waters, and estuaries.

Waters and wetlands that cannot trace a continuous hydrological connection to a navigable water of the United States are not tributary to waters of the United States. These are termed "isolated

wetlands." Isolated wetlands are jurisdictional when their destruction or degradation can affect interstate or foreign commerce.

In general, a Corps permit must be obtained before placing fill in wetlands or other waters of the United States. The type of permit depends on the acreage involved and the purpose of the proposed fill.

METHODS

The field investigations of potentially jurisdictional wetlands occurring on the study site were conducted using the routine determination method given in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the revised procedures in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Arid West Supplement) (U.S. Army Corps of Engineers 2008). This methodology entails examination of specific sample points within potential wetlands for hydrophytic vegetation, hydric soils, and wetland hydrology. By the federal definition, all three parameters must be present for an area to be considered a wetland.

Hydrophytic plant species are listed by *The National Wetland Plant List*: 2016 wetland ratings (Phytoneuron 2016-30: 1-17, published April 28, 2016). The *National List* identifies five categories of plants according to their frequency of occurrence in wetlands. The categories are:

Obligate wetland plants (OBL)	Plants that occur almost always in wetlands
Facultative wetland plants (FACW)	Plants that usually occur in wetlands
Facultative plants (FAC)	Plants that are equally likely to occur in wetlands or non-wetlands
Facultative upland plants (FACU)	Plants that usually occur in uplands
Obligate upland plants (UPL)	Plants that occur almost always in non-wetlands

An area is generally considered to have hydrophytic vegetation when more than 50 percent of the dominant species in each stratum (tree, shrub, and herb) are in the obligate wetland, facultative wetland, or facultative categories.

Hydric soils are defined by criteria set forth by the National Technical Committee for Hydric Soils (NTCHS). These criteria are given in the *Wetlands Delineation Manual* and are based on depth and duration of soil saturation. Hydric soils are commonly identified in the field by using indirect indicators of saturated soil, technically known as redoximorphic features. These features are caused by anaerobic, reduced soil conditions that are brought about by prolonged soil saturation. The most common redoximorphic features are distinguished by soil color, which is strongly influenced by the frequency and duration of soil saturation. Hydric soils tend to have dark (low chroma) colors which are often accompanied by reddish mottles (iron mottles), reddish stains on root channels (oxidized rhizospheres), or gray colors (gleying). The Arid West Supplement contains descriptions of numerous federally recognized hydric soil indicators.

Under natural conditions, development of hydrophytic vegetation and hydric soils are dependent on a third characteristic, wetland hydrology. This criterion is met if the area experiences inundation or soil saturation to the surface for a period equal to at least 5 percent of the growing season (about 14 days in the region of the study site) in a year of median rainfall. In most cases, this criterion can only be measured directly by monitoring of the site through an entire wet season. In practice, the hydrological status of a particular area is usually evaluated using indirect indicators. Some of the indicators that are commonly used to identify wetland hydrology include biotic crusts and oxidized rhizospheres around roots. The Arid West Supplement gives thorough descriptions of numerous federally recognized indicators of wetland hydrology.

Field Methods

LSA senior soil scientist Chip Bouril investigated the study site on June 7, 2018. The last significant rainfall prior to the site visit occurred the previous April.

Potential jurisdictional boundaries were mapped using a global positioning system (GPS) receiver with sub-meter accuracy. Boundaries were determined by following a combination of the limits of hydrophytic vegetation, the limits of observed redoximorphic mottling and wetland hydrology indicators, and topographic breaks. LSA established 11 wetland Sample Points on the study site. All data from the 11 Sample Points were recorded on standard wetland determination data forms (all forms are attached at the end of this report).

OBSERVATIONS

Potential jurisdictional features are shown on Figure 3.

Wetlands

A south-draining swale containing hydrophytic vegetation is located in the eastern portion of the study site. Surface water was observed in the swale area shortly after a rainfall event in March 2018. The northern portion of the study site and swale is a mowed "lawn" portion of the public park. The southern portion of the swale is a mature riparian tree canopy with a mostly impenetrable thicket of Himalayan blackberry understory. An informal mowed trail leads around the western edge of the riparian area, and the trail cuts through the riparian area near the southern end of the study area.

Sample Points 1, 2, 3, and 4 were placed in a transect across the southern end of the riparian swale, with Sample Point 2 located near the topographic center of the swale. Sample Point 1 has a predominant canopy of arroyo willow (FAC) and predominant understory of Himalayan blackberry (FAC) and California rose (FAC), meeting jurisdictional vegetation criteria. The soil contains abundant redoximorphic mottling. No surface evidence of standing water was observed, but the soil was damp during the June site investigation. Understory vegetation at Sample Point 2 included strongly hydrophytic hyssop loosestrife (*Lythrum hyssopifolia*, OBL) and pennyroyal (*Mentha pulegium*, OBL) under a canopy of valley oak. The soil contained strong redoximorphic mottling to the surface and surface matting from seasonally ponded water. Sample Point 3 supported a mix of mostly hydrophytic vegetation species, had abundant redoximorphic soil mottling, and had surface evidence of wetland hydrology. Sample Point 4, placed farther upslope from the swale, contained a mix of hydrophytic and non-hydrophytic vegetation, minimal mottling that did not meet hydric soil

criteria, and no surface evidence of wetland hydrology, thus failing to meet jurisdictional wetland criteria. Sample Points 1, 2, and 3 meet jurisdictional wetland criteria.

Sample Points 5 and 6 were placed along the edge of the swale farther to the north. Sample Point 5 had vegetation meeting hydrophytic vegetation criteria, soil with redoximorphic mottling, and evidence of wetland hydrology, while Sample Point 6 failed to meet any of the three jurisdictional criteria. These sample points therefore straddle the jurisdictional wetland boundary.

Sample Points 7 and 8 were placed in and adjacent to the swale near the southern end of the mowed lawn area. Sample Point 7, within the swale, contained strongly hydrophytic vegetation including hyssop loosestrife and pennyroyal, redoximorphic mottling, and surface evidence of wetland hydrology. Sample Point 8, slightly upslope to the west, did contain redoximorphic soil mottling, but had vegetation that failed to meet hydrophytic vegetation criteria and no evidence of wetland hydrology.

Sample Point 9 was placed in the northern portion of the swale which was covered in deep wood chips which have suppressed most of the understory vegetation. Some understory vegetation cover was present, though, and most of these species were hydrophytic. The soil underneath the wood chips contained abundant redoximorphic mottling up to the mineral soil surface. Thus, accounting for the disturbance of the artificially suppressed vegetation, Sample Point 9 meets jurisdictional wetland criteria.

The hydrophytic vegetation in the northern portion of the swale is limited to a relatively narrow area within the study site boundary, while the southern and riparian forest portion of the swale is much wider and extends to and slightly beyond the eastern edge of the study area. This eastern edge is difficult to access because of the blackberry thicket. This wetland feature is mapped as Seasonal Wetland A, with a potential jurisdictional area of 44,435 square feet (1.020 acres).

Sample Point 10 was placed north of Seasonal Wetland A in a separate patch of strongly hydrophytic vegetation and strong hydric soil indicators that was surrounded by non-hydrophytic vegetation as partially illustrated by Sample Point 11. This feature is separately mapped as Seasonal Wetland B, with a potential jurisdictional area of 380 square feet (0.008 acres).

Other Waters of the United States

An engineer-surveyed underground storm drain runs underneath a graveled roadway from Front Street south to an outlet inside the Seasonal Wetland A riparian forest and feeds a channel that is within the study site for a distance of approximately 135 linear feet before exiting the study site boundary. (This feature roughly parallels the eastern side of the study site to its southern tip.) The likely excavated channel has an un-vegetated bed, a steep cut bank, and shows evidence of scour and sediment transport. Most of the channel is inaccessible because of the blackberry thicket, but accessed portions have a 4-foot wide Ordinary High Water Mark. The channel bed was damp where observed. This feature is mapped as Channel 1, with a potentially jurisdictional length of 135 feet and potentially jurisdictional area of 540 square feet (0.012 acre) within the study site. Channel 1 is completely within the mapped area of Seasonal Wetland A.

Other Areas Investigated

The underground storm drain appears to have been constructed in uplands, conveys non-jurisdictional urban storm runoff, and is therefore determined to be non-jurisdictional.

An excavated ditch runs southward along the edge of the graveled road within the eastern portion of the northern study site and disappears into the blackberry thicket. This ditch contains sediment deposits eroded from the gravel road. This ditch is interpreted as being non-jurisdictional because it appears to have been constructed in uplands, appears to be ephemeral, and has no wetland characteristics. This ditch may supply some of the sediments observed in Channel 1.

CONCLUSION

LSA has determined that the potential Section 404 waters of the United States on the West County Trail Extension Study Site are two seasonal wetland polygons with a total area of 1.028 acres and an Other Waters of the United States channel with an area of 0.012 acre, for a total potential jurisdictional area of 1.040 acres. These potential jurisdictional features and study site boundaries are mapped on Figure 3, which is attached.

The findings and conclusions presented in this report, including the location and extent of wetlands and other waters subject to regulatory jurisdiction, represent the professional opinion of LSA. These findings and conclusions should be considered preliminary until verified by the Corps.

Please contact Dan Sidle at (510) 236-6810 or email at Dan.Sidle@lsa.net to schedule a verification visit.

Sincerely,

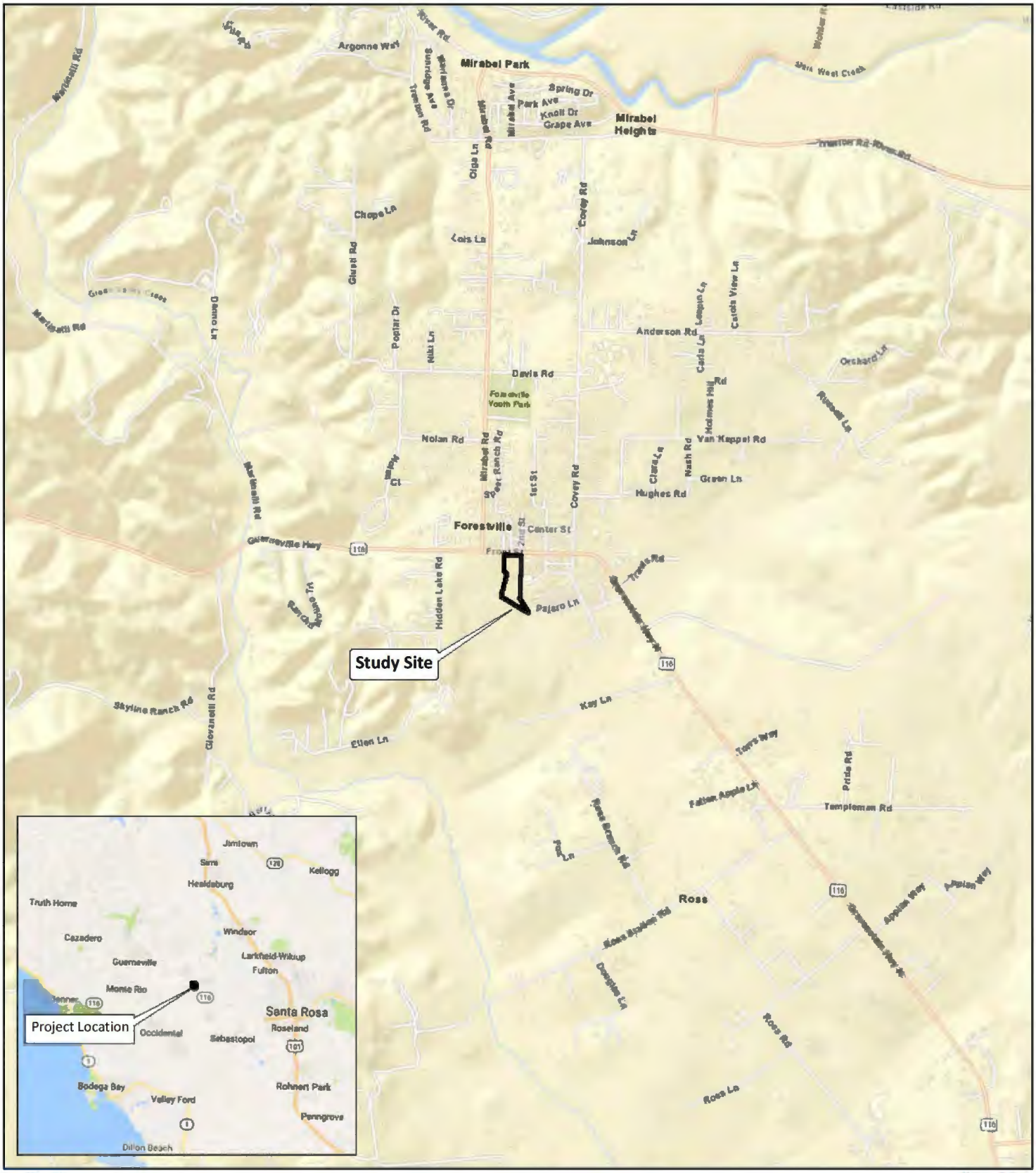
LSA Associates, Inc.

CHIP BOURIL

Chip Bouril
Senior Soil Scientist

Attachments: Figure 1: Regional Location
Figure 2: Project Vicinity
Figure 3: Potential Waters of the United States
Data Sheets 1 through 11

cc: Kenneth Tam, Park Planner II, Sonoma County Regional Parks Department
2300 County Center Drive, Suite 120A, Santa Rosa, CA, 95403
Dan Sidle, LSA



LSA

FIGURE 1

0 1000 2000

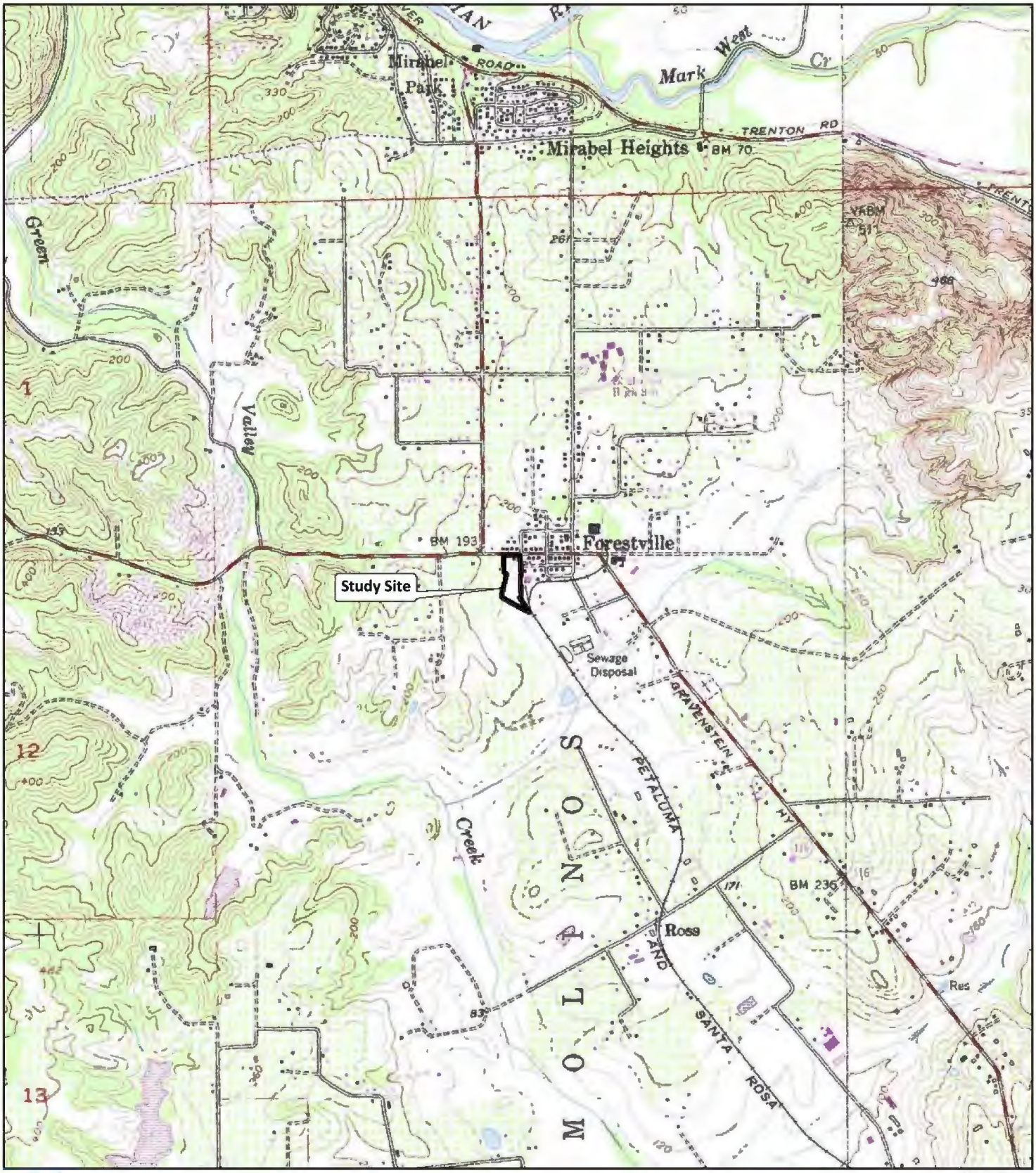
FEET

SOURCE: ESRI World Basemap, Google Streets.

I:\SOG1402\GIS\Maps\Delineation\Figure 1_Regional Location.mxd (8/9/2018)

West County Trail Extension Project
Forestville, Sonoma County, California

Regional Location



LSA

LEGEND

Study Site

FIGURE 2

N

0 1000 2000

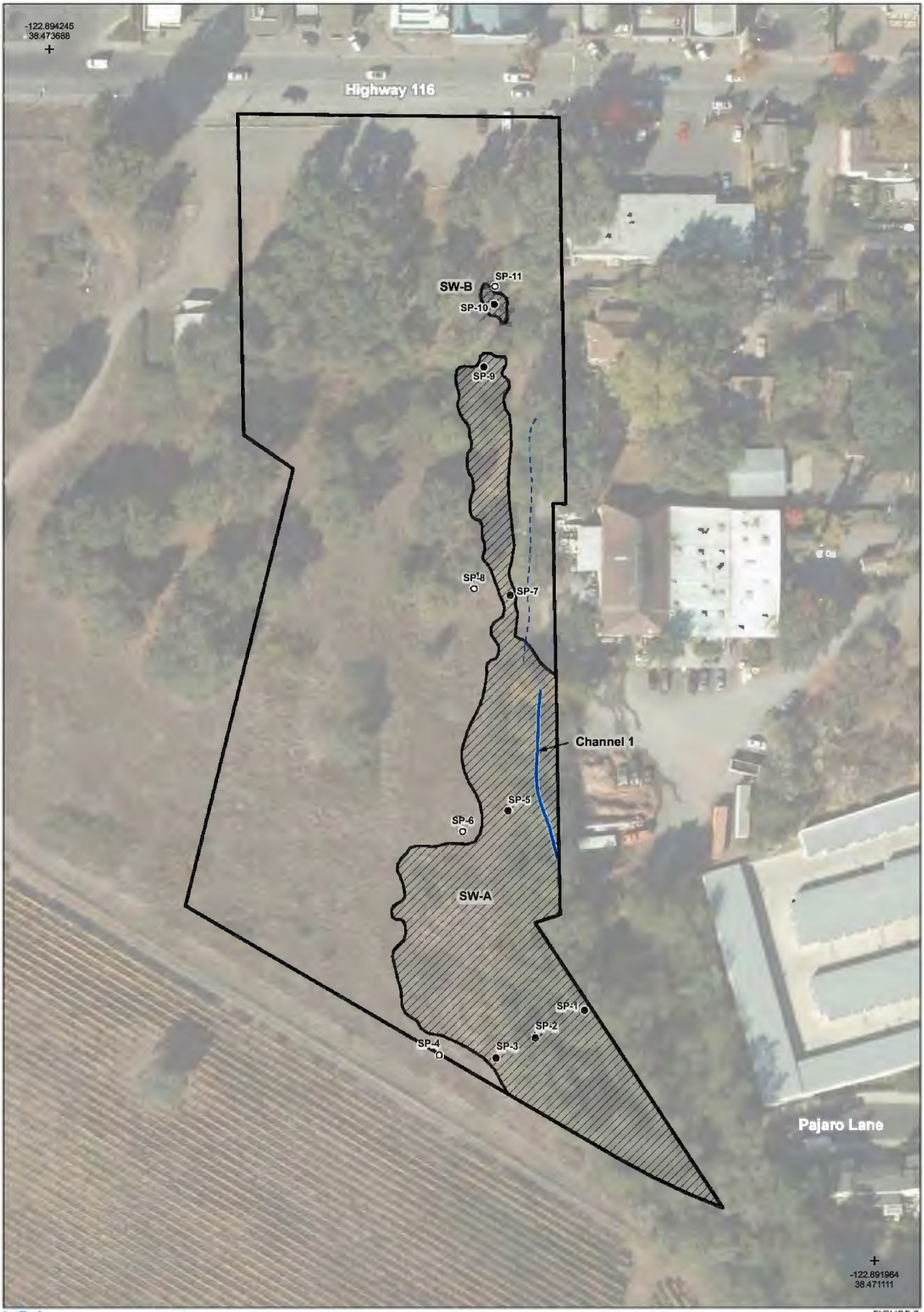
FEET

West County Trail Extension Project
Forestville, Sonoma County, California

Site Location

SOURCE: 7.5-minute Quads: *Camp Meeker, Calif.* (1971), *Sebastapol, Calif.* (1980)

I:\SOG1402\GIS\Maps\Delineation\Figure 2_Site Location.mxd (8/9/2018)



LSA

FIGURE 3

LEGEND

Study Site
Wetland Sample Point
Non-wetland Sample Point
Non-jurisdictional Ditch

Potential Waters of the United States

Wetlands
Seasonal Wetland

Other Waters
Channel

1 INCH = 70 FEET

0 35 70
FEET

SOURCE: Sonoma County Regional Parks (04/208); Esri World Imagery.

I:\SOG1402\GIS\Maps\Delineation\Figure 3_Potential Waters of the US.mxd (8/9/2018)

West County Trail Exponsion Project

Potential Waters of the United States

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 1

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%): <4

Subregion (LRR): LRR C Lat: Long: Datum:

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)

Are Vegetation ____ Soil ____ or Hydrology ____ Significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____

Are Vegetation ____ Soil ____ or Hydrology ____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:

VEGETATION

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. SALIX LASIOLEPIS	90	X	FACW
2. UMBELLULARIA CALIFORNICA	10		FAC
3. QUERCUS LOBATA	40	X	FACU
4.			
Total Cover: 130			
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
Total Cover: ____			
Herb Stratum (Plot size: 25'D)			
1. RUBUS ARMENIACUS	60	X	FAC
2. HOLCUS LANATUS	5		FAC
3. CAREX BARBARAE	5		FAC
4. ROSA CALIFORNICA	40	X	FAC
5. TOXICODENDRON DIVERSILOBUM	2		UPL
6.			
7.			
8.			
Total Cover: 112			
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
Total Cover: ____			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____.

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%
— Prevalence Index is ≤3.0[1]
— Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____.

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR3/2		—				LS	
3-7	"		10YR3/3	<2	C	M/PL	FSL?	
7-12	"		5YR3/4	10	C	PF/PL	LFS?	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

ADJ. TO PATH

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C5)
- ___ Thin Muck Surface (C7)
- X Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No Y Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO STG. INDICATORS. I USE STRONG SOIL REDOX AS INDICATOR OF HYDROLOGY.

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 2

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): <4

Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____ Soil _____ or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No _____

Hydric Soil Present? Yes X No _____

Wetland Hydrology Present? Yes X No _____

Is the Sampled Area within a Wetland? Yes X No _____

Remarks:

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. QUERCUS LOBATA	100	X	FACU
2.			
3.			
4.			
Total Cover: _____			
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
Total Cover: _____			
Herb Stratum (Plot size: _____)			
1. LYTHRUM HYSSOPIFOLIA	15	X	OBL
2. JUNCUS PATENS	5		FACW
3. MENTHA PULEGIUM	15	X	OBL
4. JUNCUS BUFONIUS	5		FACW
5. HOLCUS LANATUS	15	X	FAC
6. RUMEX CRISPUS	5		FAC
7. CAREX DENSA	20	X	OBL
8. UNGRASS POLLINUX?	10		
Total Cover: 90			
Woody Vine Stratum (Plot size: _____)			
1. RUBUS	20	X	FAC
2.			
Total Cover: _____			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR3/2		7.5YR4/6	20	C	PF,PL	FSL	
2-6	10YR3/1		5YR3/4	10	C	PF	"	
6-10	5GY4		"	2	C/D	PF,PL		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ____ Histosol (A1)
- ____ Histic Epipedon (A2)
- ____ Black Histic (A3)
- ____ Hydrogen Sulfide (A4)
- ____ Stratified Layers (A5) (LRR C)
- ____ 1 cm Muck (A9) (LRR D)
- ____ Depleted Below Dark Surface (A11)
- ____ Thick Dark Surface (A12)
- ____ Sandy Mucky Mineral (S1)
- ____ Sandy Gleyed Matrix (S4)
- ____ Sandy Redox (S5)
- ____ Stripped Matrix (S6)
- ____ Loamy Mucky Mineral (F1)
- ____ Loamy Gleyed Matrix F2)
- ____ Depleted Matrix (F3)
- ____ Redox Dark Surface (F6)
- ____ Depleted Dark Surface (F7)
- ____ Redox Depressions (F8)
- ____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ____ 1 cm Muck (A9) (LRR C)
- ____ 2 cm Muck (A10) (LRR B)
- ____ Reduced Vertic (F18)
- ____ Red Parent Material (TF2)
- ____ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ____

Depth (inches): ____

Hydric Soil Present? Yes X No ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1) (**Nonriverine**)
- ____ Sediment Deposits (B2) (**Nonriverine**)
- ____ Drift Deposits (B3) (**Nonriverine**)
- ____ Surface Soil Cracks (B6)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Water-Stained Leaves (B9)
- ____ Salt Crust (B11)
- ____ Biotic Crust (B12)
- ____ Aquatic Invertebrates (B13)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres along Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Plowed Soils (C5)
- ____ Thin Muck Surface (C7)
- X Other (Explain in Remarks) WATER STAINED SPEC.

Secondary Indicators (2 or more required)

- ____ Water Marks (B1) (**Riverine**)
- ____ Sediment Deposits (B2) (**Riverine**)
- ____ Drift Deposits (B3) (**Riverine**)
- ____ Drainage Patterns (B10)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Shallow Aquitard (D3)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: ADVENTITIOUS ROOTS ON GRASS.

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 3

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): 5

Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____ Soil _____ or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No _____

Hydric Soil Present? Yes X No _____

Wetland Hydrology Present? Yes X No _____

Is the Sampled Area within a Wetland? Yes X No _____

Remarks:

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. QUERCUS LOBATA	100	X	FACU
2.			
3.			
4.			
Total Cover: _____			
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
Total Cover: _____			
Herb Stratum (Plot size: _____)			
1. FESTUCA PERENNIS	40	X	FAC
2. GALIUM APARINE	20	X	FACU
3. HOLCUS LANATUS	20	X	FAC
4. AVENA SP.	4		UPL
5. VICIA SATIVA	10		FACU
6. GERANIUM DISSECTUM	10		UPL
7.			
8.			
Total Cover: _____			
Woody Vine Stratum (Plot size: _____)			
1. RUBUS ARMENIACUS	20	X	FAC
2.			
Total Cover: _____			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR3/2		—				SL	
2-10	10YR3/2		7.5YR3/4	8-20	C	PL	SL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- 3 Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C5)
- ___ Thin Muck Surface (C7)
- X Other (Explain in Remarks) ADVENTITIOUS ROOTS

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 4

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): 5

Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____ Soil _____ or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No _____

Hydric Soil Present? Yes _____ No X

Wetland Hydrology Present? Yes _____ No X

Is the Sampled Area within a Wetland? Yes _____ No X

Remarks:

E SP-3 SP-4 W

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum (Plot size: _____)			
1. FESTUCA PERENNIS	20	X	FAC
2. HOLCUS LANATUS	20	X	FAC
3. AVENA SP.	30	X	UPL
4. VICIA VILLOSA	10		UPL
5. BROMUS DIANDRUS	10		UPL
6. CARDUUS PYCNOCEPHALUS	1		UPL
7. MEDICAGO POLYMORPHA	1		FACU
8. RAPHANUS SATIVUS	5		UPL
Total Cover:			
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR3/2							
4-9	10YR3/2		10YR3/3	<1	C	PF/M	FSL	FAINT
9-11	10YR3/2		"	~5	C	PF/M	"	FAINT

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ____ Histosol (A1)
- ____ Histic Epipedon (A2)
- ____ Black Histic (A3)
- ____ Hydrogen Sulfide (A4)
- ____ Stratified Layers (A5) (LRR C)
- ____ 1 cm Muck (A9) (LRR D)
- ____ Depleted Below Dark Surface (A11)
- ____ Thick Dark Surface (A12)
- ____ Sandy Mucky Mineral (S1)
- ____ Sandy Gleyed Matrix (S4)
- ____ Sandy Redox (S5)
- ____ Stripped Matrix (S6)
- ____ Loamy Mucky Mineral (F1)
- ____ Loamy Gleyed Matrix F2)
- ____ Depleted Matrix (F3)
- ____ Redox Dark Surface (F6)
- ____ Depleted Dark Surface (F7)
- ____ Redox Depressions (F8)
- ____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ____ 1 cm Muck (A9) (LRR C)
- ____ 2 cm Muck (A10) (LRR B)
- ____ Reduced Vertic (F18)
- ____ Red Parent Material (TF2)
- ____ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ____

Depth (inches): ____

Hydric Soil Present? Yes ____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1) (**Nonriverine**)
- ____ Sediment Deposits (B2) (**Nonriverine**)
- ____ Drift Deposits (B3) (**Nonriverine**)
- ____ Surface Soil Cracks (B6)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Water-Stained Leaves (B9)
- ____ Salt Crust (B11)
- ____ Biotic Crust (B12)
- ____ Aquatic Invertebrates (B13)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres along Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Plowed Soils (C5)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ____ Water Marks (B1) (**Riverine**)
- ____ Sediment Deposits (B2) (**Riverine**)
- ____ Drift Deposits (B3) (**Riverine**)
- ____ Drainage Patterns (B10)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Shallow Aquitard (D3)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: NO SEC. INDICATORS

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 5

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): < 5

Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____ Soil _____ or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

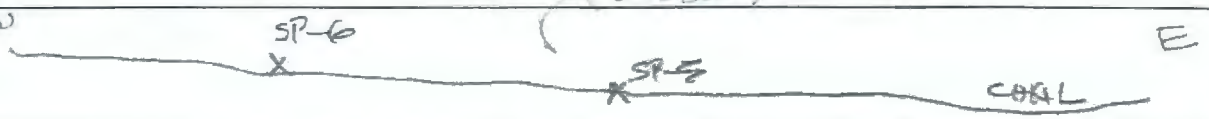
Hydrophytic Vegetation Present? Yes X No _____

Hydric Soil Present? Yes X No _____

Wetland Hydrology Present? Yes X No _____

Is the Sampled Area within a Wetland? Yes X No _____

Remarks:



VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. QUERCUS LOBATA	10	X	FACU
2.			
3.			
4.			
Total Cover: _____			
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
Total Cover: _____			
Herb Stratum (Plot size: _____)			
1. HOLCUS LANATUS	30	X	FAC
2. CYPERUS ERUGROSTIS	20	X	FACW
3. HYPERICUM PERFORATUM	1		FACU
4. LYTHRUM HYSSOPIFOLIA	T		OBL
5.			
6.			
7.			
8.			
Total Cover: 54			
Woody Vine Stratum (Plot size: _____)			
1. RUBUS ARMENIACUS	30	X	FAC
2.			
Total Cover: _____			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR3/2		—				FSL	
3-8	10YR3/2		10YR4/4	?				
			10YR6/3	<1				
			10YR3/4	5	C	PL		
8-12	10YR3/2		7.5YR3/3	5	C	PL, M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C5)
- ___ Thin Muck Surface (C7)
- X Other (Explain in Remarks) SUPPRESSED VEG.

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: MOSS ON BARE SPT.

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 6

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): ~5

Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____ Soil _____ or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No X

Hydric Soil Present? Yes _____ No X

Wetland Hydrology Present? Yes _____ No X

Is the Sampled Area within a Wetland? Yes _____ No X

Remarks:

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover: _____			
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
Total Cover: _____			
Herb Stratum (Plot size: _____)			
1. HOLCUS LANATUS	60	X	FAC
2. BROMUS HORDEACEUS	10		FACU
3. AVENA SP.	2		UPL
4. RUMEX ACETOCELLA	25	X	FACU
5. DAUCUS CAROTA	2		UPL
6.			
7.			
8.			
Total Cover: _____			
Woody Vine Stratum (Plot size: _____)			
1. RUBUS ARMENIACUS	1		FAC
2.			
Total Cover: _____			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	61	x 3 =	183
FACU species	35	x 4 =	180
UPL species	4	x 5 =	20
Column Totals:	100 (A)		383 (B)

Prevalence Index = B/A = 3.83

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR4/2		—					
4-11	10YR4/2		10YR3/3	0-5	C	PL		MOSTLY ON WALL OF SAMPLE HOLE

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ____ Histosol (A1)
- ____ Histic Epipedon (A2)
- ____ Black Histic (A3)
- ____ Hydrogen Sulfide (A4)
- ____ Stratified Layers (A5) (LRR C)
- ____ 1 cm Muck (A9) (LRR D)
- ____ Depleted Below Dark Surface (A11)
- ____ Thick Dark Surface (A12)
- ____ Sandy Mucky Mineral (S1)
- ____ Sandy Gleyed Matrix (S4)
- ____ Sandy Redox (S5)
- ____ Stripped Matrix (S6)
- ____ Loamy Mucky Mineral (F1)
- ____ Loamy Gleyed Matrix F2)
- ____ Depleted Matrix (F3)
- ____ Redox Dark Surface (F6)
- ____ Depleted Dark Surface (F7)
- ____ Redox Depressions (F8)
- ____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ____ 1 cm Muck (A9) (LRR C)
- ____ 2 cm Muck (A10) (LRR B)
- ____ Reduced Vertic (F18)
- ____ Red Parent Material (TF2)
- ____ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1) (**Nonriverine**)
- ____ Sediment Deposits (B2) (**Nonriverine**)
- ____ Drift Deposits (B3) (**Nonriverine**)
- ____ Surface Soil Cracks (B6)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Water-Stained Leaves (B9)
- ____ Salt Crust (B11)
- ____ Biotic Crust (B12)
- ____ Aquatic Invertebrates (B13)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres along Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Plowed Soils (C5)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ____ Water Marks (B1) (**Riverine**)
- ____ Sediment Deposits (B2) (**Riverine**)
- ____ Drift Deposits (B3) (**Riverine**)
- ____ Drainage Patterns (B10)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Shallow Aquitard (D3)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 7

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): 7

Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____ Soil _____ or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

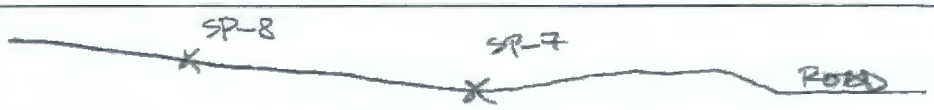
Hydrophytic Vegetation Present? Yes X No _____

Hydric Soil Present? Yes X No _____

Wetland Hydrology Present? Yes X No _____

Is the Sampled Area within a Wetland? Yes X No _____

Remarks:



VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. QUERCUS LOBATA	100	X	FACU
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum (Plot size: _____)			
1. LYTHRUM HYSSOPIFOLIA	15	X	OBL
2. MENTHA PULEGIUM	25	X	OBL
3. CYPERUS ERYTHROSTIS	15	X	FACW
4. FESTUCA PERENNIS	5		FAC
5. JUNCUS BUFONIUS	5		FACW
6.			
7.			
8.			
Total Cover: 65			
Woody Vine Stratum (Plot size: _____)			
1. RUBUS ARMENIACUS NEARBY			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

IN MOWED LAWN

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR4/2		—				FSL	
2-8	a		7.5YR3/4	5-15	C	PL	FSL	
8+	ROCK							

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C5)
- ___ Thin Muck Surface (C7)
- X Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: WATTED SURFACE, SUPPRESSED VEG

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 8

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): 10

Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____ Soil _____ or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No X

Hydric Soil Present? Yes X No _____

Wetland Hydrology Present? Yes _____ No X

Is the Sampled Area within a Wetland? Yes _____ No X

Remarks:

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. QUERCUS LOBATA	100	Y	FACU
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum (Plot size: _____)			
1. HOLCUS LANATUS	60	X	FAC
2. HYPOCHAERIS RADICATA	25	X	FACU
3. JUNCUS BUFONIUS	5		FACW
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____.

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	5	x 2 =	_____
FAC species	60	x 3 =	_____
FACU species	125	x 4 =	_____
UPL species	_____	x 5 =	_____
Column Totals:	_____ (A)		_____ (B)

Prevalence Index = B/A = >3

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR4/2		—				FSL	
2-10	10YR4/2		7.5YR3/4	15	C	PL	FSL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ____ Histosol (A1)
- ____ Histic Epipedon (A2)
- ____ Black Histic (A3)
- ____ Hydrogen Sulfide (A4)
- ____ Stratified Layers (A5) (LRR C)
- ____ 1 cm Muck (A9) (LRR D)
- ____ Depleted Below Dark Surface (A11)
- ____ Thick Dark Surface (A12)
- ____ Sandy Mucky Mineral (S1)
- ____ Sandy Gleyed Matrix (S4)
- ____ Sandy Redox (S5)
- ____ Stripped Matrix (S6)
- ____ Loamy Mucky Mineral (F1)
- ____ Loamy Gleyed Matrix F2)
- ____ Depleted Matrix (F3)
- ____ Redox Dark Surface (F6)
- ____ Depleted Dark Surface (F7)
- ____ Redox Depressions (F8)
- ____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ____ 1 cm Muck (A9) (LRR C)
- ____ 2 cm Muck (A10) (LRR B)
- ____ Reduced Vertic (F18)
- ____ Red Parent Material (TF2)
- ____ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ____

Depth (inches): ____

Hydric Soil Present? Yes X No ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1) (**Nonriverine**)
- ____ Sediment Deposits (B2) (**Nonriverine**)
- ____ Drift Deposits (B3) (**Nonriverine**)
- ____ Surface Soil Cracks (B6)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Water-Stained Leaves (B9)
- ____ Salt Crust (B11)
- ____ Biotic Crust (B12)
- ____ Aquatic Invertebrates (B13)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres along Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Plowed Soils (C5)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ____ Water Marks (B1) (**Riverine**)
- ____ Sediment Deposits (B2) (**Riverine**)
- ____ Drift Deposits (B3) (**Riverine**)
- ____ Drainage Patterns (B10)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Shallow Aquitard (D3)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO SFC INDICATORS

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 9

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%): 8

Subregion (LRR): LRR C Lat: EW Long: NS Datum:

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)

Are Vegetation X Soil X or Hydrology ____ Significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ____

Are Vegetation ____ Soil ____ or Hydrology ____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:

VEGETATION

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. QUERCUS LOBATA	100	X	FACU
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum (Plot size: 20' D)			
1. LYTHRUM HYSSOPIFOLIA	3	X	OBL
2. CYPERUS ERAGROSTIS	1		FACW
3. RUMEX CRISPUS	1		FAC
4. MEDICAGO POLYMORPHA	1		FACU
5. HYPOCHAERIS RADICATA	1		FACU
6. MENTHA PULEGIUM	2	X	OBL
7.			
8.			
Total Cover: 90%			
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: 3" SOIL COVER OF WOOD CHIPS HAS SUPPRESSED VEGETATION.

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	→							WOOD CHIPS
3-12	10YR4/2		7.5YR4/6 + 5YR4/6	5-30	C	PL	L	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C5)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: PRESUMED: REDOX TO MINERAL SOIL SFC.

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 10

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): EW NS Slope (%): 9

Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation X Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____ Soil _____ or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No _____

Hydric Soil Present? Yes X No _____

Wetland Hydrology Present? Yes X No _____

Is the Sampled Area within a Wetland? Yes X No _____

Remarks:

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum (Plot size: _____)			
1. LYTHRUM HYSSOPIFOLIA	15	X	OBL
2. CYNODON DACTYLON	15	X	FACU
3. JUNCUS BUFONIUS	20	X	FACW
4. HYPOCHAERIS RADICATA	4		FACU
5. FESTUCA PERENNIS	2		FAC
6. POA ANNUA	3		FAC
7.			
8.			
Total Cover: 59			
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

WOOD CHIPS ABVE SUPPRESSED VEGETATION COVER.

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR4/2							WOOD CHIPS
1-6	10YR4/2		7.5YR3/4	7	C	PL	FSL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C5)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: USE STRONGLY HYDROPHYTIC VEG + REDOX MOTTLING TO WITNESS SOIL SURFACE OF INDICATORS.

WETLAND DETERMINATION DATA FORM — Arid West Region

Project Site: West County Trail Expansion Project City/County: Forestville /Sonoma Sampling Date: 7 June 2018

Applicant/Owner: Sonoma County Parks and Recreation State: CA Sampling Point: 11

Investigator(s): C. Bouril Section, Township, Range: Section 7, T7N, R9W, Camp Meeker Quad

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): 7

Subregion (LRR): LRR C Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Goldridge fine sandy loam, 2-9 percent and 9-15 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____ Soil _____ or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No X

Hydric Soil Present? Yes _____ No X

Wetland Hydrology Present? Yes _____ No X

Is the Sampled Area within a Wetland? Yes _____ No X

Remarks:

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. QUERCUS LOBATA	100	X	FACU
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum (Plot size: _____)			
1. CYNODON DACTYLON	100	X	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

— Dominance Test is >50%

— Prevalence Index is ≤3.0[1]

— Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

— Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR2/2		—					WOOD CHIPS
2-6	10YR2/2		10YR4/4	3	C	M	FSL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C5)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: NO INDICATORS OBSERVED

May 23, 2018

Ms. Casey McDonald
Adobe Associates, Inc.
1220 North Dutton Avenue
Santa Rosa, CA 95401

Updated Focused Traffic Analysis for the Forestville Town Park Project

Dear Ms. McDonald;

As requested, W-Trans has prepared a focused traffic analysis for proposed improvements to the Forestville Town Park located at 6708 Highway 116 in the County of Sonoma. The purpose of this letter is to address comments as contained in a letter dated June 1, 2017, to Ms. Hannah Spencer of the County of Sonoma from Ms. Patricia Maurice of Caltrans regarding the proposed project's site access and subsequent comments from Caltrans relative to the draft version of this letter dated March 22 and May 11, 2018.

Existing Conditions

The study area consists of Front Street (State Route (SR) 116) along the frontage of the site. In the study area, SR 116 runs east-west and is about 40 feet wide with two travel lanes and parking on both sides. To the west of the project site, there are planned improvements at the intersection Mirabel Road/Front Street (SR 116) to install a roundabout and add the south leg of the intersection. The most recent improvement plans available on-line are enclosed for reference. The planned improvements would divert regional traffic around downtown Forestville. Turning movement counts at the intersection of Mirabel Road/ Front Street (SR 116) were collected August 24, 2017 in conjunction with SR 116 segment counts provided by Caltrans. Based on these Caltrans counts, the roadway experiences its peak volume on weekdays during the evening peak hour.

Project Description

The proposed project would develop and add facilities to an existing County park located at 6708 Highway 116. The 7.79-acre site currently has trails and picnic tables with a gravel parking lot and can be accessed along most of the site's Front Street frontage except about 100 feet where concrete parking stoppers have been lined up to create a barrier. As proposed, the park would have one vehicular access point on Front Street along the easterly edge of the site about 20 feet west of the Second Street/Front Street intersection. The existing bus stop would be relocated about 175 feet to the west and a bus pullout would be installed. As proposed the project would provide an assembly structure, public restrooms, parking area, gathering area, amphitheater, picnic areas, trailhead, bike staging area, and more.

Trip Generation

To determine what improvements are needed to achieve acceptable access at the driveway, the average trips generated by the site were estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2017 for "Public Park" (ITE LU #441). While the fitted curve equation was used for the daily and p.m. peak hour estimate, there is not an equation for the a.m. peak hour trip estimates so the average rate was applied. Based on these rates, the park without and with the project is expected to generate 93 daily trips, none of which would occur during the morning peak hour, but including 23 trips during the evening peak hour. Table 1 summarizes the average trips generated by the site.

Table 1 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Public Park	7.79 ac	12.00*	93	0.02	0	0	0	2.96*	23	13	10

Note: ac= acres; * = rate based on the fitted curve equation

Access Analysis

The proposed single access to the site would be along the easterly edge of the site about 20 feet west of the Seconds Street/Front Street intersection. As proposed, the driveway would be full access. In response to a comment from Caltrans the planned improvements at the Mirabel Road/Front Street (SR 116) intersection and those for the proposed park were compared for continuity. Based on the most recent set of plans available for the roundabout at Mirabel Road/Front Street, there would be delineating median striping at the proposed park driveway. The striped median would result in right-turn only access. Based on the potential repercussions resulting from either beginning the striped median west of the driveway or moving the median east to allow for a break, which would interfere with the nearby intersection, retention of the Caltrans striping as designed is recommended. To achieve conformance with this design it is recommended that the proposed project include installation of a right-turn only sign visible to outbound park visitors to reinforce the restrictions imposed by the striped median.

The AutoTURN application of AutoCAD was used to evaluate the adequacy of the proposed driveway for the largest vehicle expected to access the site, which is a single-unit commercial truck. This category would include food catering trucks and "U-Haul" trucks. Based on the review performed, it appears that trucks of this size could turn right into and out of the project driveway. While both movements would require the driver to maneuver the vehicle into the opposing driveway lane, as discussed below in further detail, there would be sufficient sight distance for a vehicle to see, and yield to, a truck entering or exiting the driveway. The truck turning movement exhibit is enclosed.

Sight Distance

Sight distances along Front Street (SR 116) at the project driveway were evaluated based on criteria contained in the Caltrans *Highway Design Manual*. At driveways a substantially clear line of sight should be maintained between the driver of a vehicle waiting on the driveway and the driver of an approaching vehicle. Adequate time must be provided for the waiting vehicle to either cross, turn left, or turn right, without requiring the through traffic to radically alter their speed. Sight distance should be measured from a 3.5-foot height at the location of the driver on the minor road to a 4.25-foot object height in the center of the approaching lane of the major road. Set-back for the driver on the crossroad is 15 feet, measured from the edge of the traveled way.

Available sight distance at the proposed driveway was field measured as well as reviewed using available aerials and the project site plan. Based on a design speed of 25 mph, the minimum stopping sight distance needed is 150 feet. Sight distance to the west was clear and unobstructed at the time of the site visit, but if vehicles parked near the driveway, the line of sight would be obstructed. Based on the park's site plan parking needs to be prohibited for a distance of at least 60 feet west of the driveway. However, given the location of the proposed bus pullout, it is recommended that parking be restricted for the full distance between the project driveway and the bus pullout. Though sight distance to the east is partially obstructed by on-street parking, it should be noted that with the driveway restricted to right-turn only, this direction would not be a factor in the sight distance review as drivers would only be looking to the west to turn right. However, parking should be prohibited between the project driveway and the east side of the Second Street/Front Street intersection to improve the line of sight between pedestrians at the crosswalk on the east leg and eastbound vehicles.

Consideration was also given to the adequacy of sight lines for a driver following a vehicle that slows or stops prior to turning into the site. Given that SR 116 is straight and flat in the project vicinity, drivers have a clear and unobstructed line of sight that exceeds the 150 feet of stopping sight distance needed.

Potential Driveway Conflicts at the Second Street Intersection

The proposed project would be located about 20 feet east of the Second Street/Front Street (SR 116) intersection. It is understood that relocating the proposed driveway closer to the intersection would conflict with a drainage inlet. Though the driveway is close to the intersection, drivers of any southbound vehicles from Second Street and northbound from the proposed park would be able to see each other. However, it is recommended that the tree on the northwest corner of Second Street/Front Street be removed or at least trimmed up to a minimum of seven feet about the street level to improve not only sight lines between drivers on Second Street and at the proposed driveway, but also to open sight lines from Second Street to the west.

Proportional Share at Mirabel Road/Front Street

The County is currently in the process of designing a roundabout to be installed at the intersection of Mirabel Road/Front Street. Although this future improvement would benefit the proposed project, the County does not have a mechanism in place to allow payment of a proportional share fee, so one is not recommended.

Conclusions and Recommendations

- The plans for access to the proposed park and the Caltrans plans for the Mirabel Road/Front Street roundabout are in conflict, with the Caltrans design limiting access at the project driveway to right turns in and out.

- Single-unit trucks can negotiate the turn into or out of the driveway, though the movement would require use of both lanes; because of the adequacy of sight lines, this is expected to result in acceptable operation.

- Sight distance to the west of the project driveway would be obscured by on-street parking.

- It is recommended that the proposed project be consistent with the Caltrans plan for right-turn access only; a right-turn only sign should be installed at the project driveway, visible to outbound vehicles to reinforce that left turns are prohibited.

- It is recommended that parking to the west be restricted for the full distance between the bus pullout and the project driveway

- It is recommended that parking be prohibited to the east of the project driveway to the adjacent driveway for the shopping center to improve the line of sight between vehicles approaching the Second Street/ Front Street intersection and pedestrians entering the crosswalk.

- It is recommended that the tree on the northwest corner of the Seconds Street/Front Street intersection be removed or trimmed to improve sight lines between the project driveway and Second Street as well as from Second Street to the west.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,

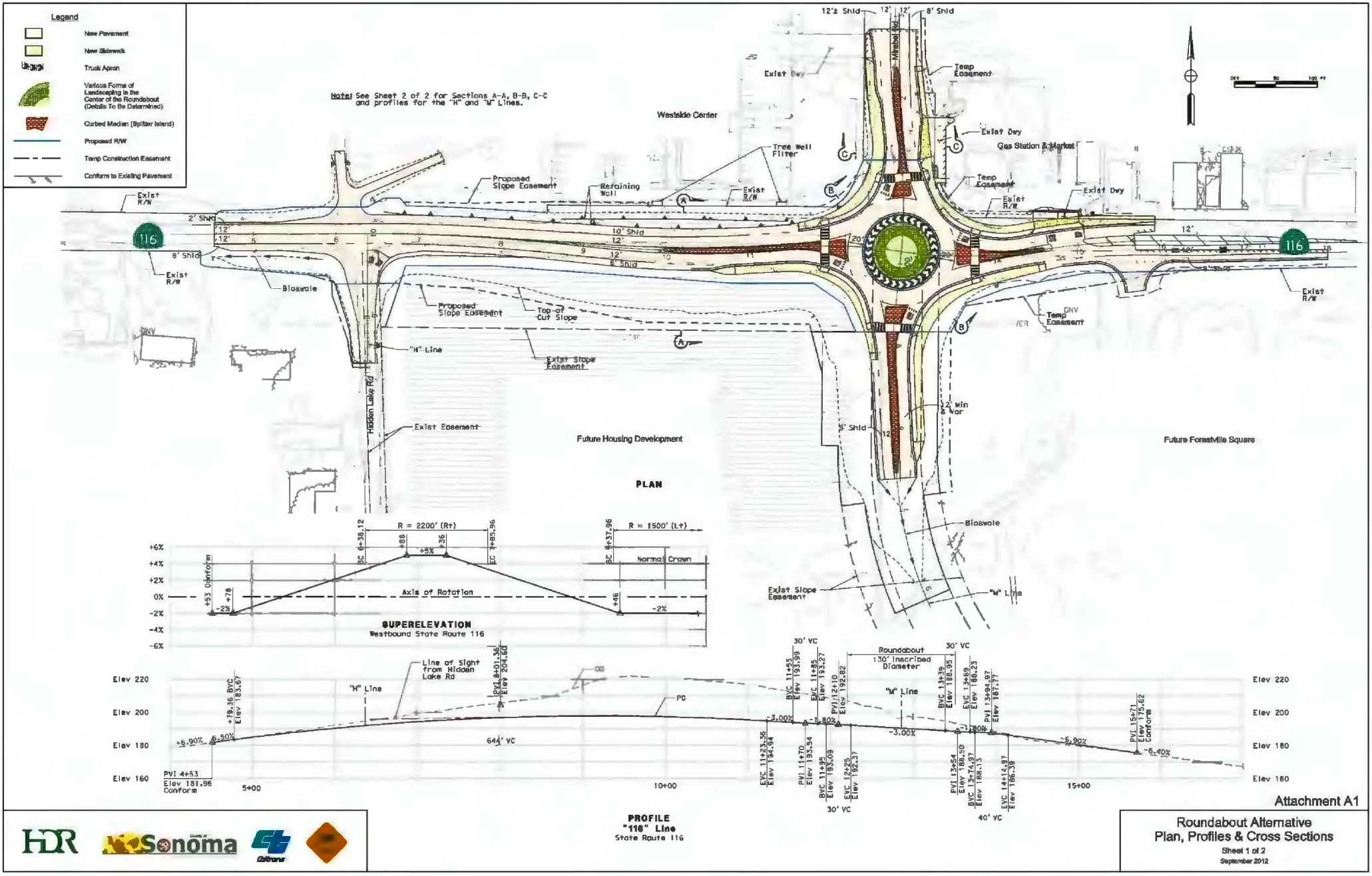
Briana Byrne, EIT
Assistant Traffic Engineer

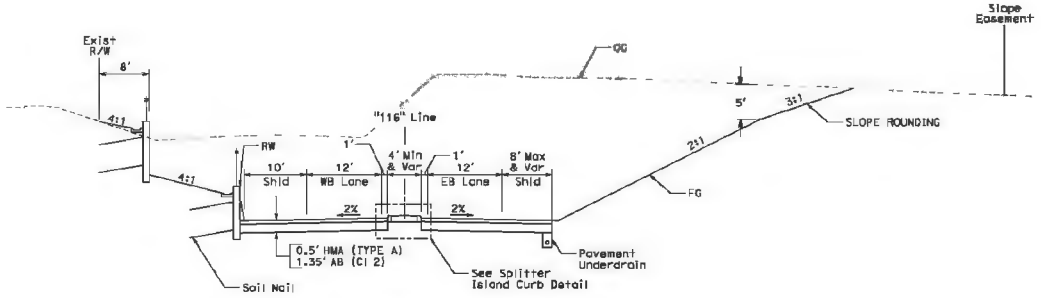
Dalene J. Whitlock, PE, PTOE
Principal

REGISTERED PROFESSIONAL ENGINEER
DALENE J. WHITLOCK
TR001552
TRAFFIC
STATE OF CALIFORNIA

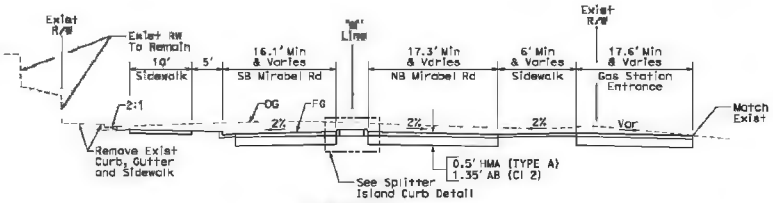
DJW/bkb/SOX608.L1

Enclosures: Mirabel Road/Front Street Roundabout Improvement Plan
Truck Turning Movement Exhibit

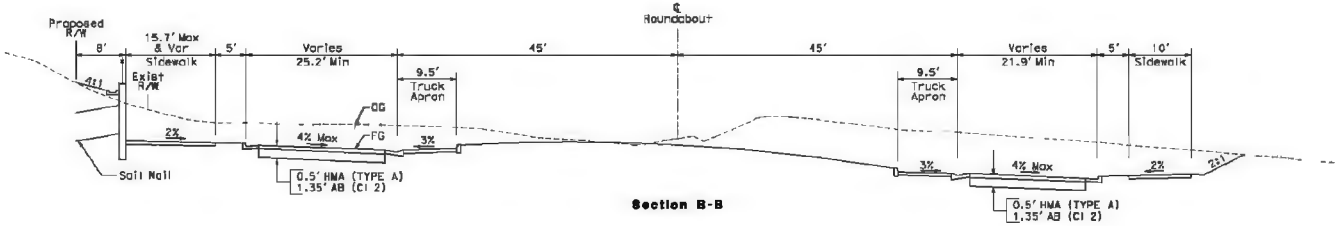

Legend
New Pavement
New Sidewalk
Truck Apron
Various Forms of Landscaping in the Center of the Roundabout (Details To Be Determined)
Curbed Median (Splitter Island)
Proposed R/W
Temp Construction Easement
Conform to Existing Pavement
Note: See Sheet 2 of 2 for Sections A-A, B-B, C-C and profiles for the "H" and "M" Lines.
Westside Center
Gas Station & Market
Future Housing Development
Future Forestville Square
Hidden Lake Rd
Mirabel Rd
Tree Well Filter
Retaining Wall
Proposed Slope Easement
Top of Cut Slope
Exist Slope Easement
Exist Easement
Temp Easement
Bioswale
"H" Line
"M" Line
Exist R/W
Exist Dwy
12' Min Var
PLAN
SUPERELEVATION
Westbound State Route 116
R = 2200' (Rt)
R = 1500' (Lt)
Normal Crown
Axis of Rotation
Roundabout
130' Inscribed Diameter
Line of Sight from Hidden Lake Rd
644' VC
PROFILE
"116" Line
State Route 116
Attachment A1
Roundabout Alternative
Plan, Profiles & Cross Sections
Sheet 1 of 2
September 2012



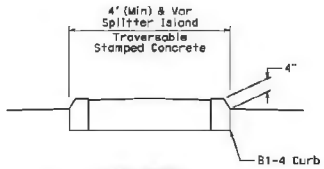
Section A-A



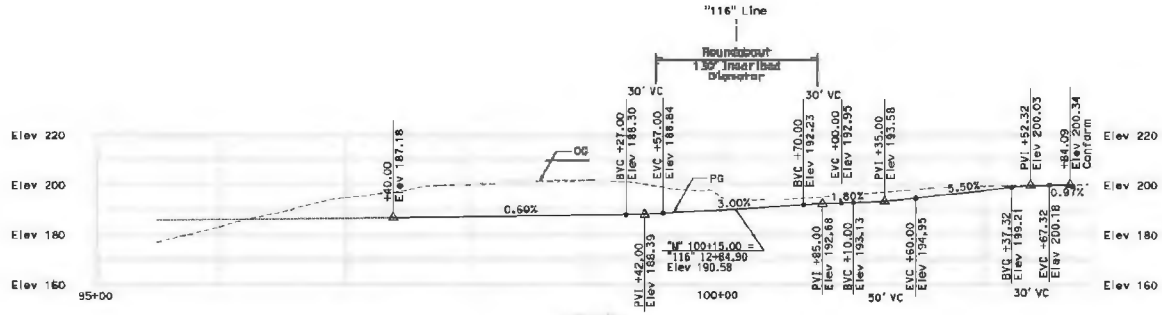
Section C-C



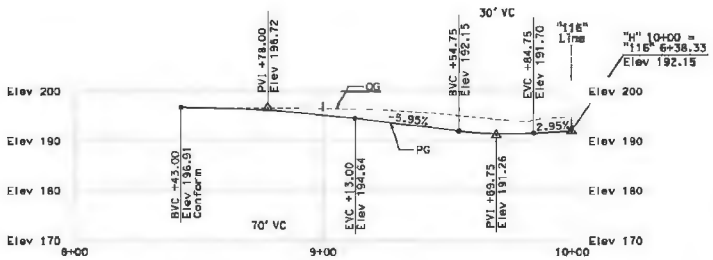
Section B-B



Monolithic Splitter Island Curb Detail



PROFILE
"M" Line
Mirabel Road

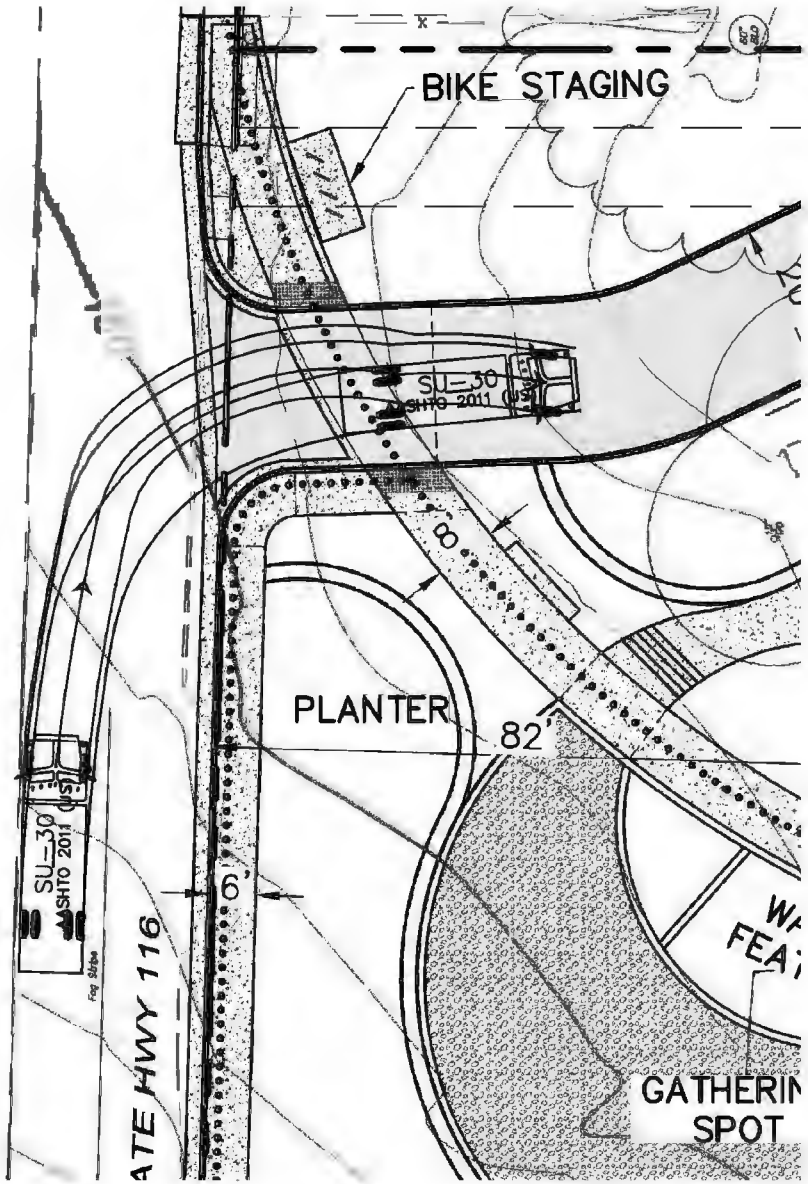


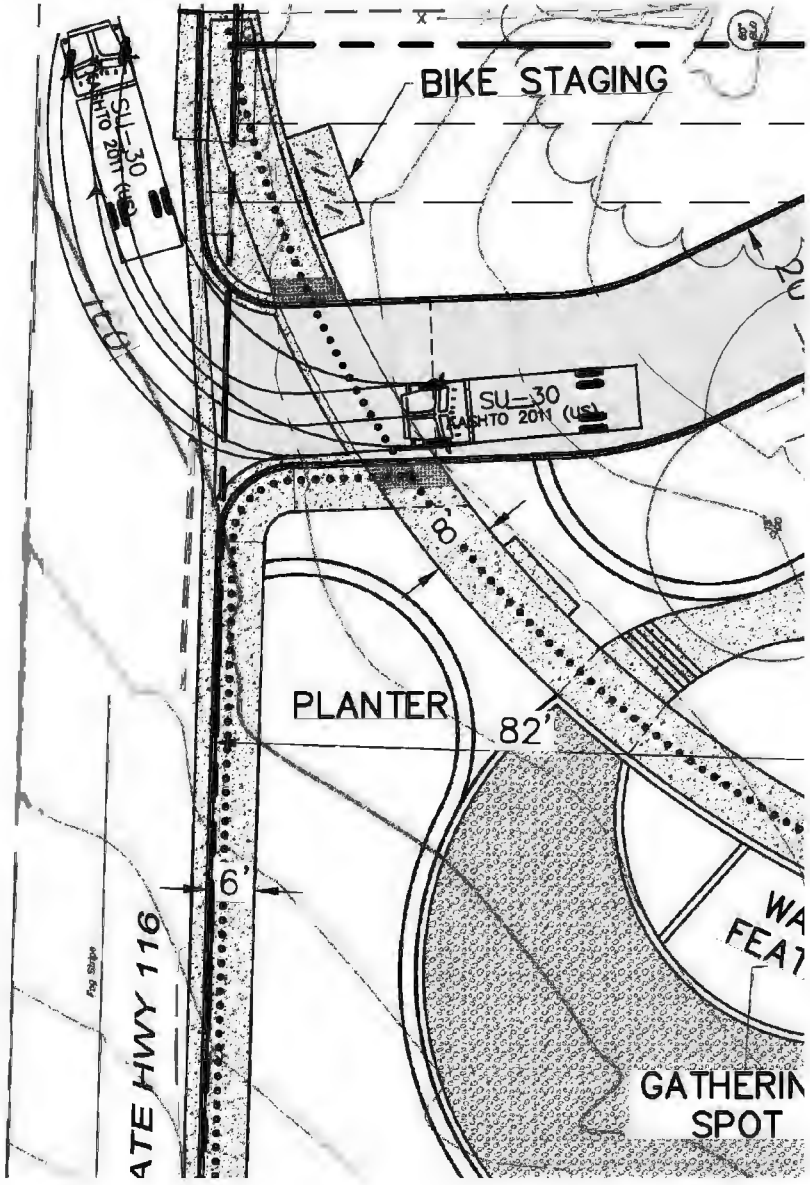
PROFILE
"H" Line
Hidden Lake Road

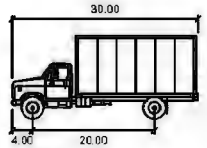
Attachment A2

HDR Sonoma County Caltrans M Work

Roundabout Alternative
Plan, Profiles & Cross Sections
Sheet 2 of 2
06/11/2012







SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

N

Forestville Town Park Project

SOX608

AutoTurn - Single Unit Truck

May 2018

FORESTVILLE DOWNTOWN PARK
PARKING ANALYSIS

By Georgia McDaniel, Project Planner

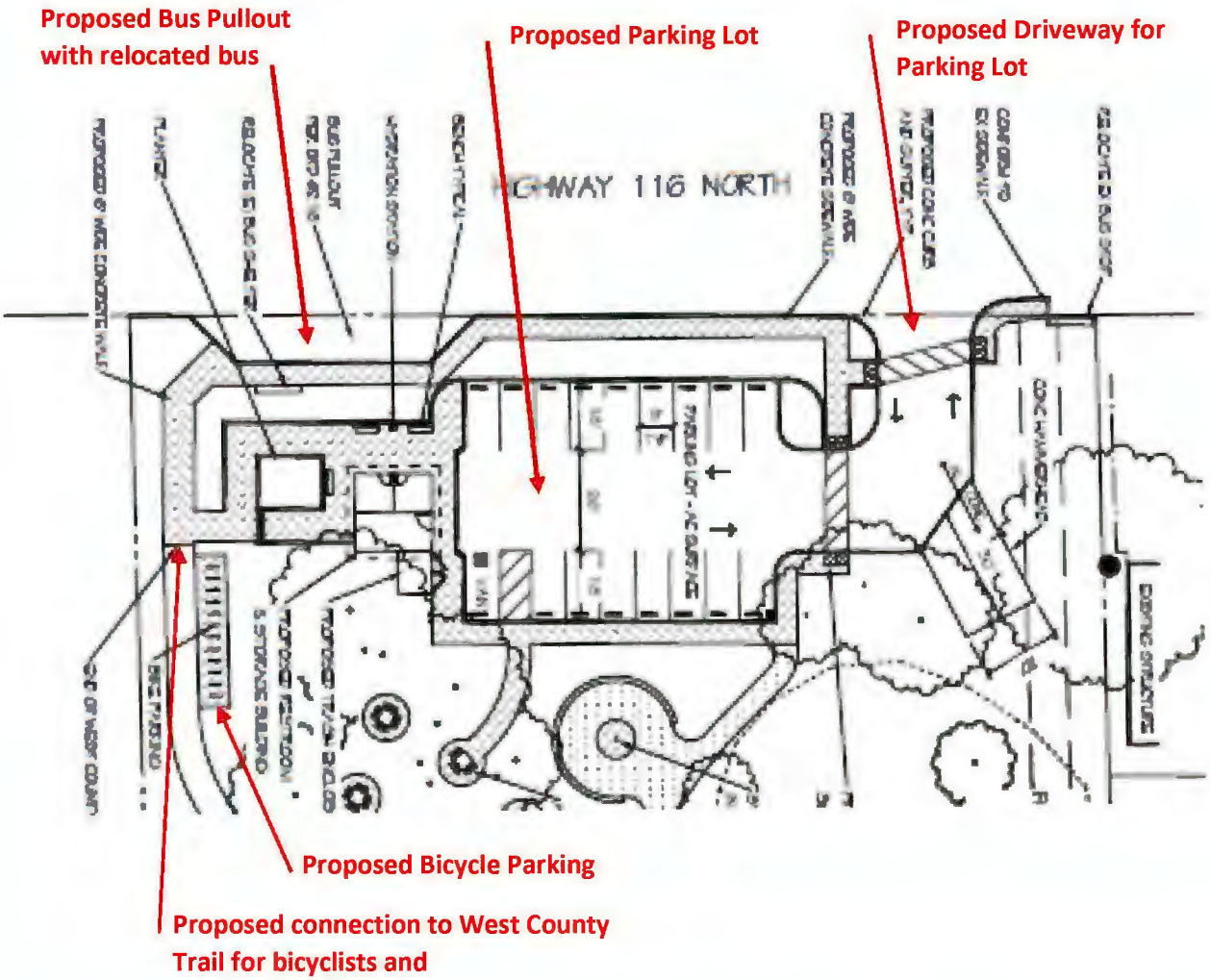
EXISTING CONDITIONS

Park Property Location along Highway 116

Current On-Street Parking along Hwy 116 and Off-Street Parking on Undeveloped Frontage of Park Property

Existing Parking on Undeveloped Frontage of Park

PROPOSED IMPROVEMENTS ALONG FRONTAGE OF PARK PROPERTY



Proposed Facilities for People Visiting the Park and Attending Events

People Driving Private Vehicles
Proposed Parking Spaces in Parking Lot
1 ADA Accessible Van Parking Space
16 9' x 18' Parking Spaces
Total of 17

Per the Project Proposal, the proposed parking lot was sized to minimize impact on the site and to accommodate the number of people currently using the park.

People Using Public Transit
Proposed Bus Pull Out located on Highway 116
With relocated Bus Shelter
Buses provide service between Coddingtown and Monte Rio.
Existing transit facilities provide adequate access that would be enhanced with the planned relocation of the stop along the frontage and provision of a bus pullout.

Bicycle Facilities
Proposed Bike Parking Area for 24 bicycles
Along existing West County Trail near Highway 116

Pedestrians Facilities
Proposed 6' wide concrete sidewalk along Highway 116
Proposed connection of West County Trail to Highway 116

Trip Generation
Per Second Update of TIS," the park without and with the project is expected to generate 91 daily trips, none of which would occur during the morning peak hour but including 23 trips during the evening peak hour."

Site Distance
Per Second Update of TIS," sight distance to the west and east of the project driveway would be obscured by on-street parking. Given the line of sight and the location of the proposed bus pullout, it is recommended that parking be restricted for the full distance between the project driveway and the bus pullout.

Parking should be prohibited between the project driveway and the east side of the Second Street/Front Street intersection to maintain a clear line of sight between drivers at the project driveway and eastbound vehicles, as well as a clear line of sight to pedestrians in the crosswalk on the east leg.

VMT
Per Second Update of TIS," based on this assessment, the proposed project can be classified as local-serving, and based on guidance provided by OPR, may be presumed to result in a less-than-significant VMT impact.

(Note: Less than 110 trips generated.)

EVENTS

Farmer's Market: already currently held on the site, operates weekly from June 1-October 30, 3-7 p.m. It draws about 25-50 people at any given time with a maximum total of about 150. Held weekly, the current parking area and some street parking accommodates all vehicles.

Moreover, the American Wine Building has agreed to host overflow parking, a need which has not yet occurred. Note: the relocation of the parking area on the proposed design is directly across from the American Wine Building overflow parking lot.

Forestville Business Exposition: draws about 100 people over a 4 hour period, 3-7 p.m.

Craft Faire: two events, each over a 4 hour period, 3-7 p.m., with each drawing about 100 people.

Holiday Tree Lighting: annual event in December, 4-6 p.m., which draws about 150 people.

Chamber of Commerce events: 5 anticipated. Musical venues, poetry readings, vintage car show. Afternoon events, each generating 100 attendees max.

Park fundraisers: 2 anticipated, sponsored by The Forestville Planning Association. Late afternoon barbeque and music events with anticipated attendance of 100.

PARKING SPACE REQUIREMENTS

Parking Spaces Required

EVENT	NUMBER OF EVENTS	MAX. NUMBER OF GUESTS
Farmer's Market	Weekly	150
Forestville Business Exposition		100
Craft Faire	2	100
Holiday Tree Lighting	1	150
Chamber of Commerce events	5	100
Chamber of Commerce events	2	100

The formula used for determining the number of parking spaces required for wineries and tasting room is used to determine the number of parking spaces for the park. The calculations assume 2.5 persons/vehicle.

An event with 100 guests requires 40 parking spaces. An event with 150 guests requires 60 parking spaces.

Parking Regulations Exceptions

There are no exceptions in Chapter 26 for parking requirements.

On-Street Parking to meet Required Parking Requirement

Per the Project Proposal, the proposed parking lot was sized to minimize impact on the site and to accommodate the number of people currently using the park.

The American Wine Building has agreed to host overflow parking, a need which has not yet occurred. Note: the relocation of the parking area on the proposed design is directly across from the American Wine Building overflow parking lot.

No on-street parking will be allowed along the front of the property to insure adequate site distance at the driveway entry/exit. However, there are other parking spaces along Front Road/Highway 116 and side streets where people can park and then walk along the streets to the park.

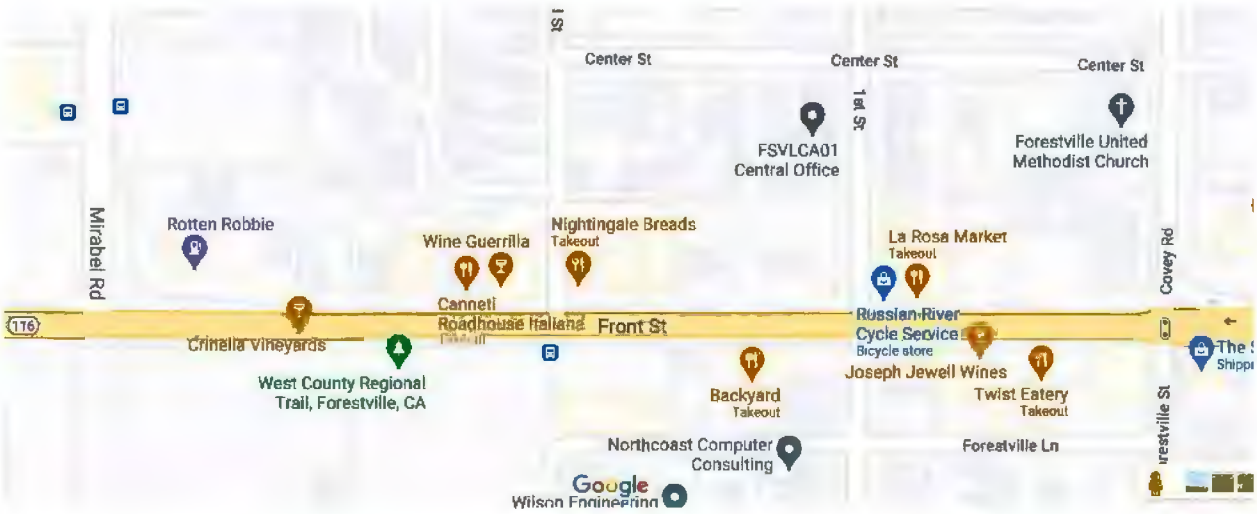
Assumptions regarding Off-site Parking for Reduction in Requirement of On-site Parking

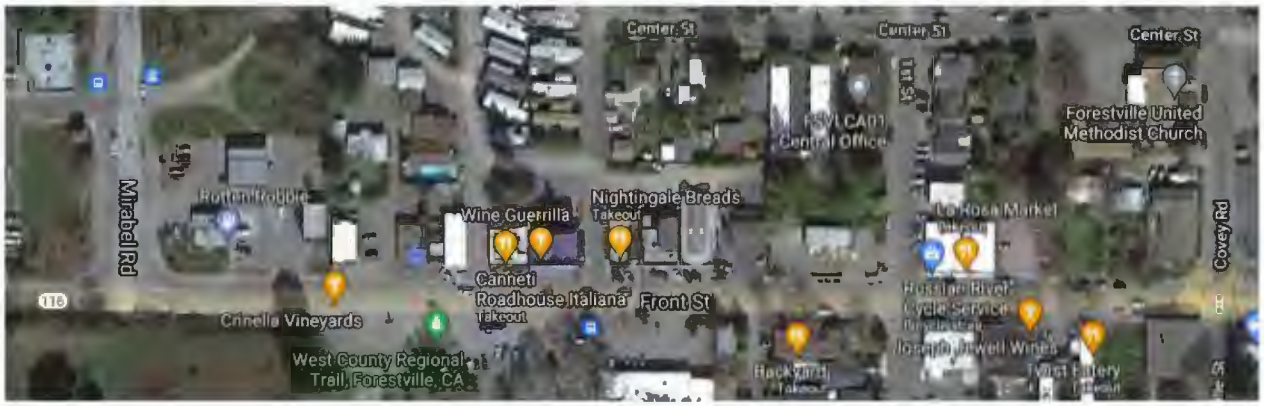
1. Since the park has the West County Trail traversing through it, an assumption is made that 24 of the people attending an event will ride a bike and park in a bicycle space. Assuming 2.5 people per car, this reduces the demand for vehicle parking spaces by 10.

2. Since there is a bus stop located at the park along Front Street/Highway 116, an assumption is made that 5 people will use transit. This reduces the demand for on-site parking spaces by 2.

3. Per the Proposal Statement, "the American Wine Building has agreed to host overflow parking, a need which has not yet occurred. Note: the relocation of the parking area on the proposed design is directly across from the American Wine Building overflow parking lot." The location of the American Wine Building on Google Maps is shown below. There also is a building with wine tasting directly across Highway 116, Wine Guerilla, with a parking lot behind it with 6 parking spaces. This may be the building that is referred to in the Proposal Statement. Either way, an assumption is made that 6 cars can park on American Wine Building property. This reduces the demand for on-site parking spaces by 6.

4. Since there is on-street parking along Front Road/Highway 116 on the opposite side of Highway 116 and on side streets such as Mirabel Road, First and Second Streets, Center Street, and Covey Road, an assumption is made that at least 15 cars will do so. This reduces the demand for on-site parking spaces by 15.





5. There is room for 8 cars to park parallel on Highway 116 along the frontage of the open parcel to the west without blocking access to the structure located on the property. Since there is room for 8 vehicles to park along the frontage of the adjacent parcel, an assumption is made that people will do so. This reduces the demand for parking spaces by 8. In addition, 2 cars can park along Highway 116 to the west on the adjacent undeveloped parcel directly across from the terminus of Mirabel Road.

The parking space requirement for the largest event with 150 people is 60 parking spaces. The parking space demand for on-site parking will be reduced by

People riding bicycles	10
People taking the bus	2
Parking on American Wine Building property	6
On street parking on the opposite side of Highway 116 and on side streets	15
On street parking along Highway 116 frontage of adjacent properties	10
Subtotal - Available Off-site Parking	43 parking spaces
Subtotal – Available On-site Parking	17
Total Available Parking Spaces	60 parking spaces

CONCLUSION

There are enough parking spaces both on-site and off-site to meet the 60 parking space requirement for the largest events with 150 people.

The proposed on-site parking lot will provide parking spaces for 43 people.

The bicycle parking provides enough parking for 24 bicyclists.

The bus stop located along the frontage of the park provides the opportunity for several people to ride the bus from Santa Rosa or Monte Rio to the Forestville Downtown Park for events, to visit and enjoy the park and/or walk or ride along the West County Trail, without the need for a vehicle parking space.

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality

429 East Cotati Avenue
Cotati, California 94931

Tel: 707-794-0400 *Fax: 707-794-0405*
www.illingworthrodkin.com *illro@illingworthrodkin.com*

June 24, 2021

Dino Bonos
Bonos Land Planning
822 College Avenue, Suite D
Santa Rosa, CA 95404

VIA E-MAIL: bonoslandplan@att.net

SUBJECT: Forestville Downtown Park, Sonoma County, CA
Addendum Memorandum to the Environmental Noise Assessment

Dear Dino:

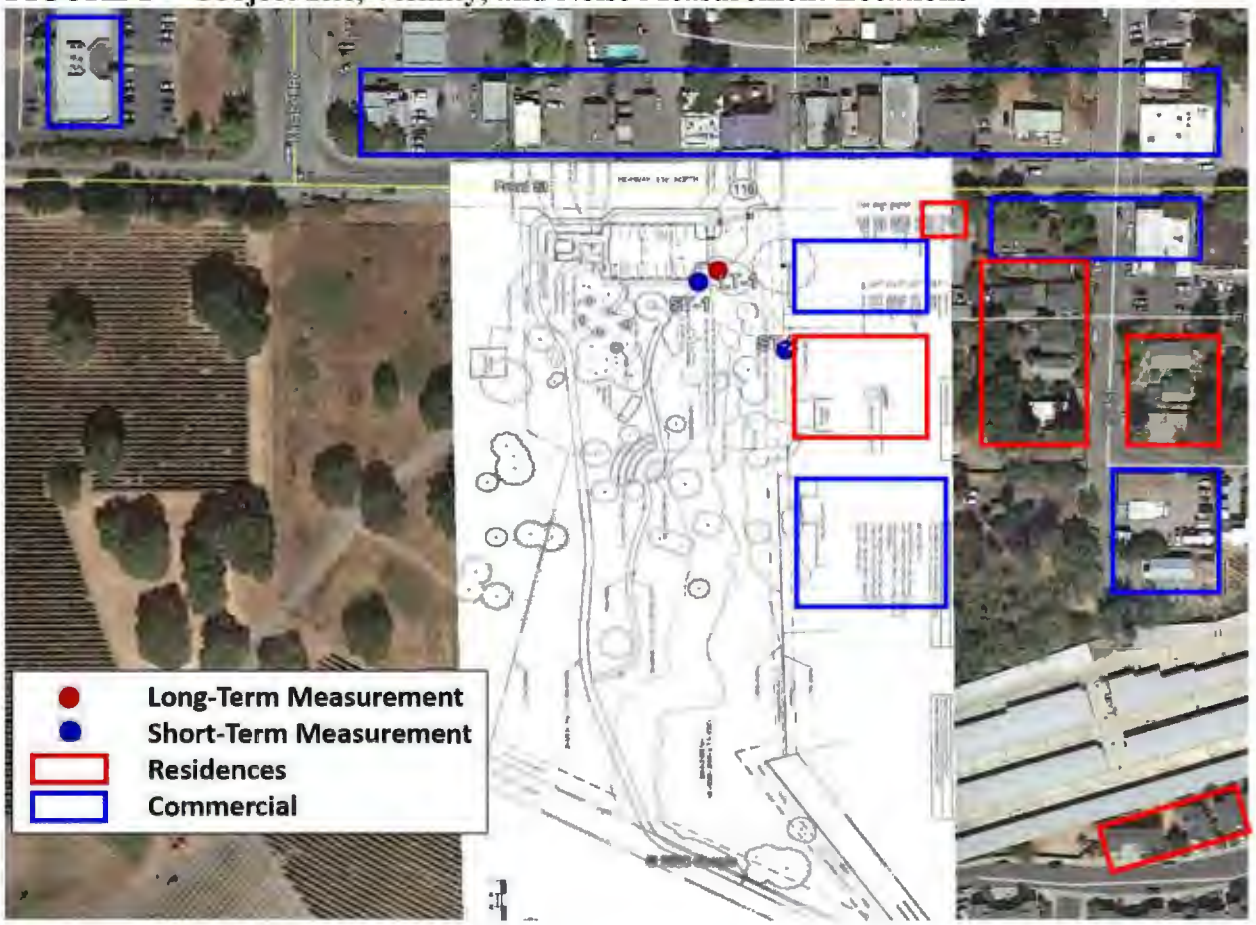
Illingworth & Rodkin, Inc. completed an environmental noise assessment for the Forestville Downtown Park in February 2018. Since the completion of the noise assessment, the total area of the project site located at 6708 State Route 116 (Front Street) has reduced from 7.79 acres to 4.2 acres. The site currently has trails and picnic tables with a gravel parking lot. The project would include a 105-seat amphitheater, public restrooms, parking area, gathering area, picnic areas, trailhead, and a bike staging area. Additionally, Table 1 summarizes the current and anticipated yearly events at the park. Figure 1 shows the updated site plan superimposed on an aerial map of the project site and the surrounding area, with the nearest noise-sensitive receptors identified.

TABLE 1 Information about Current and Anticipated Events at the Project Site

Event	Duration and Frequency	Maximum Expected Occupancy	Amplified Music/ Speech?	New or Current
Christmas Tree Lighting	1 to 2 hours, once a year in December	100 people	Yes	Current and Future
School Fundraiser	3 to 4 hours, once a year	75 to 100 people	Yes	Current and Future
School Field Trips	1 to 2 hours, four times a year	20 to 40 people	No	New
Bike and Walk Fundraiser	3 to 4 hours, once a year	75 to 100 people	Yes	Current and Future
Farmers' Market	3.5 hours, once a week for 16 weeks in the summer	100 to 150 people (total daily), 50 maximum at any given time	Yes	Current and Future

Event	Duration and Frequency	Maximum Expected Occupancy	Amplified Music/ Speech?	New or Current
Business Exposition	4 hours, once a year	100 to 200 people (total daily per event)	Yes	Current and Future
Unknown – Flea Marks, Community events, etc.	1 to 4 hours, 1 to 4 times per year	Est. 50 to 100 people	Yes	New
Skatespot Non-profit Fundraiser	4 hours, once a year in April	Est. 150 people	Unknown	Current and Future
Forestville Downtown Oaks Park Fundraiser	4 to 6 hours, once a year	Est. 50 to 100 people	Yes	New

FIGURE 1 Project Site, Vicinity, and Noise Measurement Locations



Source: Google Earth, 2021.

The purpose of this letter is to determine if the updated project site plan and event description would result in any new impacts at the existing noise-sensitive land uses surrounding the site.

Regulatory Criteria

Sonoma County General Plan 2020 Noise Element. The Sonoma County Noise Element of the 2020 General Plan identifies a goal to:

> *Protect people from the adverse effects of exposure to excessive noise and to achieve an environment in which people and land uses function without impairment from noise.*

The following policies, which are applicable for use at the Project, are intended to achieve this goal:

NE-1a: Designate areas within Sonoma County as Noise Impacted if they are exposed to existing or projected exterior noise levels exceeding 60 dBA L_{dn}, 60 dBA CNEL, or the performance standards of Table NE-2.

NE-1b: Avoid noise-sensitive land use development in noise impacted areas unless effective measures are included to reduce noise levels. For noise due to traffic on public roadways, railroads, and airports, reduce exterior noise to 60 dBA L_{dn} or less in outdoor activity areas and interior noise levels to 45 dBA L_{dn} or less with windows and doors closed. Where it is not possible to meet this 60 dBA L_{dn} standard using a practical application of the best available noise reduction technology, a maximum level of up to 65 dBA L_{dn} may be allowed provided that the interior noise level shall be maintained so as not to exceed 45 dBA L_{dn}.

NE-1c: Control non-transportation related noise from new projects. The total noise level resulting from new sources shall not exceed the standards in Table NE-2 of the recommended revised policies as measured at the exterior property line of any adjacent noise-sensitive land use. Limit exceptions to the following:

1) If the ambient noise level exceeds the standard in Table NE-2, adjust the standard to equal the ambient level, up to a maximum of five dBA above the standard, provided that no measurable increase (i.e. +/- 1.5 dBA) shall be allowed.

2) Reduce the applicable standards in Table NE-2 by five dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises, such as pile drivers and dog barking at kennels.

3) Reduce the applicable standards in Table NE-2 by five dBA if the proposed use exceeds the ambient level by 10 dBA or more.

4) For short-term noise sources, which are permitted to operate no more than six days per year, such as concerts or race events, the allowable noise exposures shown in Table NE-2 may be increased by five dBA. These events shall be subject to a noise management plan, including provisions for maximum noise level limits, noise monitoring, complaint response and allowable hours of operation. The plan shall address potential cumulative noise impacts from all events in the area.

5) Noise levels may be measured at the location of the outdoor activity area of the noise-sensitive land use, instead of at the exterior property line of the adjacent noise-sensitive use where:

   a. The property on which the noise-sensitive use is located has already been substantially developed, pursuant to its existing zoning, and

   b. There is available open land on these noise-sensitive lands for noise attenuation.

   Note, this exception may not be used on vacant properties, which are zoned to allow noise-sensitive uses.

TABLE NE-2 Maximum Allowable Noise Exposures for Non-Transportation Sources

Hourly Noise Metric[1]	Maximum Exterior Noise Level Standards, dBA	
	Daytime: 7:00 a.m. to 10:00 p.m.	Nighttime: 10:00 p.m. to 7:00 a.m.
L_{50} (30 minutes in any hour)	50	45
L_{25} (15 minutes in any hour)	55	50
L_{08} (5 minutes in any hour)	60	55
L_{02} (1 minute in any hour)	65	60

[1]The sound level exceeded n% of the time in any hour. For example, the L_{50} is the value exceeded 50% of the time or 30 minutes in any hour; this is the median noise level. The L_{02} is the sound level exceeded one minute in any hour.

Noise Impact Assessment

The proposed project would potentially generate two noise impacts at the surrounding land uses: project traffic and special events.

Project traffic would require analysis of two different impacts:

- A significant increase in traffic volumes with the inclusion of the proposed project. Typically, for noise environments less than 60 dBA L_{dn}, a significant impact would occur if project-generated traffic resulted in a permanent noise increase of 5 dBA or more. For noise environments of 60 or more dBA L_{dn}, a 3 dBA increase would be considered a significant impact. A 3 dBA increase would occur if the inclusion of project-generated traffic resulted in roadway traffic to double, while a 5 dBA increase would occur if traffic volumes tripled with the inclusion of project traffic.

- Currently, the parking lot is located at the north of the site adjacent to SR 116. Under project conditions, the parking lot would remain in the same location. In the original noise assessment completed in February 2018, the proposed parking area was relocated to the eastern boundary of the site. Project traffic would include automobile and light vehicle traffic accessing the parking lot during the daytime hours. Any special events occurring at the project site would include pickup truck deliveries, but medium or heavy trucks are not expected at the park. Noise produced by automobiles and light vehicles is expected to

include the sounds of vehicles maneuvering within the parking area, engine starts, door slams, etc. These noises typically range from 53 to 63 dBA at 50 feet.

Special events, such as those summarized in Table 1, are expected to occur at the park. All amplified sound from speech and music or regular levels of conversation would be centered at the proposed amphitheater and outdoor seating area. Typical noise levels expected during special events at the proposed project site are summarized in Table 2, based on the data collected at the project site during an existing farmers' market. Note, the measurements made at the existing farmers' market included amplified speech, which occurred concurrently with amplified music; however, amplified speech alone, such as during student assemblies, typically result in noise levels that are 1 dBA lower than amplified music. This is reflected in the Table 2 source levels.

TABLE 2 Typical Noise Source Levels for Special Events at the Park (A-weighted L_{50} Levels)

Event or Activity	Typical Noise Level
Amplified Music[1]	54 to 64 dBA at 200 feet
Amplified Speech[1]	53 to 63 dBA at 200 feet
Non-amplified (acoustic) Music	55 to 58 dBA at 200 feet
Typical Conversation	50 to 52 dBA at 50 feet

[1] Amplified sound for the future activities would not exceed the noise levels measured here for the existing activities.

For purposes of assessing noise levels at the surrounding land uses, noise source levels summarized above are propagated to the property lines of the nearest surrounding sensitive uses. For simple, single sources, such as fixed sources, the divergence of the sound waves is hemispherical in nature, yielding a noise reduction of 6 dBA with each doubling of distance. For moving sources of noise, such as auto traffic along roadways, which are considered linear sources of noise, the divergence of the sound wave is cylindrical in nature, yielding a noise reduction of 3 to 4.5 dBA with each doubling of distance. Other effects can modify these fall-off rates, such as partial shielding from buildings or topography, atmospheric attenuation of sound, ground absorption, and meteorological effects. These effects typically reduce the noise in addition to the noise reduction due to sound divergence alone. As most of these effects will vary with time due to changing environmental conditions, it is most conservative to assume only attenuation due to divergence for outdoor activities. Therefore, this analysis conservatively assumes no additional noise reduction effects, representing the worst-case scenario.

To evaluate noise impacts on the most immediate off-site noise-sensitive uses, the closest residences to the site were identified, and noise levels were propagated to the residential property lines, as follows (see Figure 1 for locations):

Residences to the east: Several single-family residences are located adjacent to the park to the east. These residences would have direct line-of-sight to the park activities. In the original noise assessment, short- and long-term measurements were made at the project site. These levels are used in this assessment to establish existing ambient conditions at the surrounding land uses. Table

3 summarizes the existing noise levels used to quantify ambient conditions at the eastern residences.

TABLE 3 Existing Ambient Conditions at the Eastern Residences

Hourly Noise Metric	Exterior Ambient Noise Levels, dBA	
	East Residences (~160ft south of the centerline of SR 116)	
	Daytime: 7:00 a.m. to 10:00 p.m.	Nighttime: 10:00 p.m. to 7:00 a.m.
L_{50} (30 minutes in any hour)	54	44
L_{25} (15 minutes in any hour)	57	49
L_{08} (5 minutes in any hour)	61	54
L_{02} (1 minute in any hour)	65	60

While Figure 1 indicates additional residences to the east and to the southeast, these additional residences would be shielded from park activities by intervening buildings. Therefore, these residences would not have direct line-of-sight to activities at the park. Since the adjacent residences represent the worst-case scenario, the following analysis is focused on the adjacent residences only.

Project-Generated Traffic

A traffic analysis was completed for the proposed project by *W-Trans*[1] in December 2020. According to the analysis, 91 daily trips are expected at the park with and without the project. The project would produce 23 peak hour trips during the PM hour. While the peak PM trips would be the same as the traffic study analyzed in the original noise assessment completed in February 2018, the daily trips with and without the project are 2 trips reduced from the original study. Compared to the existing traffic volumes along SR 116, the daily and peak hour trips would be insignificant and would not result in a measurable increase in traffic noise levels. This would be consistent with the findings in the original noise study; therefore, no additional impact would be generated. This would be a less-than-significant impact.

Parking Lot Noise

In the most recent site plan, dated July 7, 2020, the parking lot would be located in the same location as existing conditions, which is different from the site plan analyzed in the original noise assessment. However, since the parking lot location is going to remain in the same location, the distance from the parking lot to the eastern residences would be the same. Considering the existing parking lot noise is included existing ambient noise level conditions at the eastern residences, the new parking lot located in the same place would not change existing noise level conditions. With no change from the existing conditions of the parking lot, this would result in a less-than-significant impact.

[1] W-Trans, *Second Update to the Focused Traffic Analysis for the Forestville Town Park Project*, December 22, 2020.

Amphitheater Noise

Special events expected at the park, which are summarized in Table 1, would only occur during daytime hours. The maximum number of people expected at an event would be 200 people during the once yearly business exposition. As shown in Table 1, amplified music and speech is expected at most events but not all events. However, Table 1 also indicates that amplified music and speech are already included at existing activities, such as farmers' markets, tree lighting, etc. During events when amplified music and speech are expected, this noise source type would be the dominant noise source at the event. Amplified music and speech would represent the worst-case scenario.

Amplified music and speech is expected only at the stage of the proposed amphitheater, located approximately 155 feet southwest of the nearest residential property line and approximately 325 south of the centerline of Highway 116. The stage would face northwest, away from the nearest residences. Further, the site plan, dated July 7, 2020, shows the amphitheater relocated from the previous site plan and indicates a covered stage. Assuming a covered stage with a solid wall at the back of the stage aligning with the eastern side of the stage cover shown in the site plan, which would provide shielding for the eastern residences, amplified sound was modeled in SoundPLAN, version 8.2, which is a three-dimensional ray-tracing computer program capable of modeling stationary noise sources.

Using the noise source levels provided in Table 2 as inputs to the model, noise levels were estimated at the property lines of the nearest residences to the east. These modeling results are summarized in Table 4. Since all proposed events occurring at the project site would be during daytime hours, the noise levels are assessed against the County's daytime thresholds only.

The estimated noise levels for amplified music and speech and non-amplified music shown for the 2020 site plan are about 4 dB lower than the estimated noise levels from the February 2018 noise assessment. While the noise levels are reduced, the County's NE-2 threshold would still be exceeded during the use of amplified music and speech.

Existing special events have successfully included amplified music and speech without receiving complaints from the existing residents living adjacent to the park. Therefore, without any major modifications to the existing special events, the County may permit current activities to continue as they are unless future residents complain about the excessive noise.

Assuming the County does not permit current activities to continue without mitigation, outdoor amplified music is expected to exceed the County's adjusted daytime noise limit of 49 dBA L_{50} by up to 5 dBA. Outdoor amplified speech would exceed the threshold by up to 4 dBA. Non-amplified music and typical conversations are not expected to exceed the County's daytime limit. This would continue to be a potentially significant impact.

TABLE 4 Special Event Noise Levels, L_{50}, for Noise Sources at the Stage of the Proposed Amphitheater

	L_{50} (Noise Level Exceeded 30 Minutes in any Hour), dBA
	Residences East of the Park (ST-2)
Unadjusted Table NE-2 Daytime Limit	50 dBA L_{50}
Daytime Ambient Noise Levels	54 dBA
Ambient Exceeds NE-2 Limit?	Yes
Daytime NE-2 Adjustment	+4
NE-2 Adjustment for speech and music	-5
Special Event Noise at Receptor Property Line	**Residences East of the Park (ST-2)**
Outdoor Amplified Music	44 to 54 dBA
Outdoor Amplified Speech	43 to 53 dBA
Outdoor Non-Amplified Music	45 to 48 dBA
Typical Conversation	40 to 42 dBA
Adjusted NE-2 Limits and Compliance	**Residences East of the Park (ST-2)**
Event Noises Exceed Ambient by 10 dBA?	No (all)
NE-2 Adjustment	+0 (all)
Adjusted Table NE-2 Daytime Limit	49 dBA L_{50}
Amplified Music Exceeds Adjusted NE-2?	Yes
Amplified Speech Exceeds Adjusted NE-2?	Yes
Non-Amplified Music Exceeds Adjusted NE-2?	No
Typical Conversation Exceeds Adjusted NE-2?	No

The following Mitigation Measure would be recommended to reduce noise levels during special events. These measures have been modified from the previous noise assessment to accommodate the most recent site plan.

Mitigation Measure 2 (modified):

Assuming the County would not allow existing amplified music and speech to continue to occur without mitigation, the impact would be reduced to a less-than-significant level with one of the following options implemented as part of the project's conditions of approval:

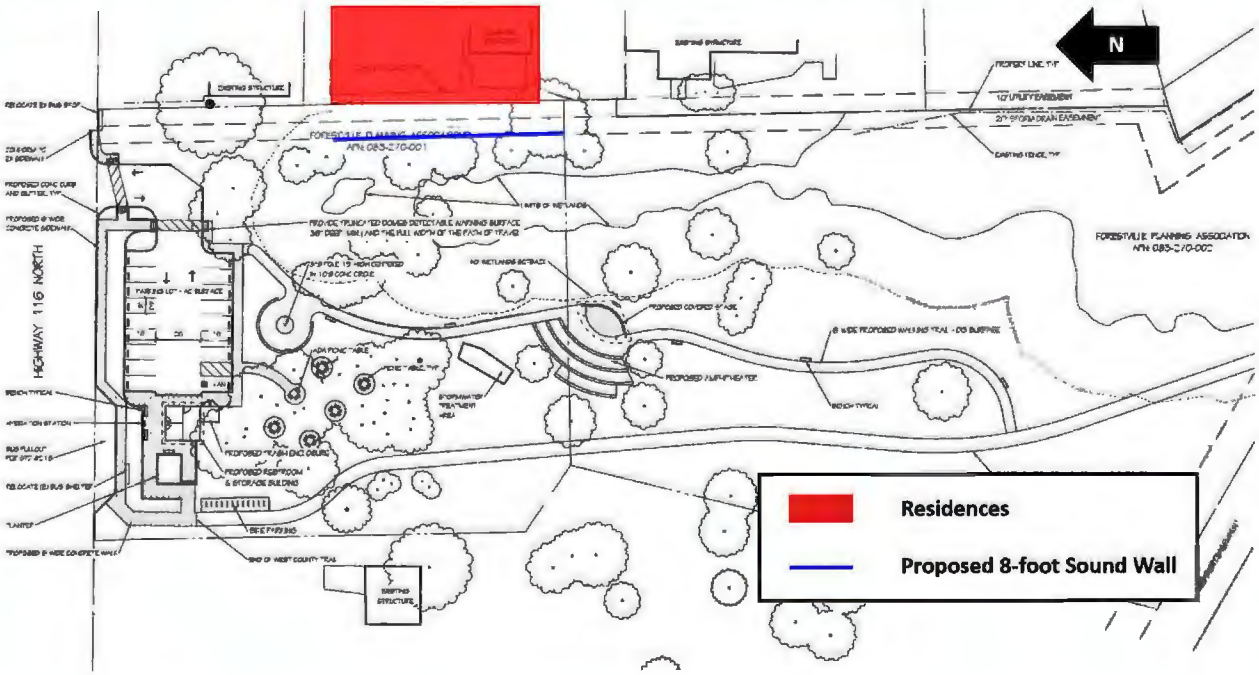
1. Prohibit amplified music and speech. Under Policy NE-1c(4) of the County's General Plan, short-term noise sources, such as concert events, would allow for the Table NE-2 thresholds to be increased by 5 dBA for up to six days a year. Therefore, amplified music and speech may be permitted for up to six days a year. During these six events, the County would require a noise management plan, including provisions for a maximum noise level limit of 54 dBA as measured at the nearest residential property line. The noise management plan would identify a procedure for responding to complaints and allowable hours of operation. The plan would also address potential cumulative noise impacts from all events in the area.

2. If the amphitheater was repositioned to face west, instead of northwest as shown in the July 7, 2020 site plan, noise levels would be reduced at the adjacent residential uses. If the wall along the back of the stage is solid from ground to overhang, with no cracks or gaps, noise levels due to amplified music would be reduce to 38 to 48 dBA, and noise levels for amplified speech would be reduce to 37 to 47 dBA. Amplified music and speech would meet the County's adjusted daytime threshold of 49 dBA L_{50} and would be allowed to operate year round.

3. Assuming that rotating the amphitheater to face west would not be a feasible option, altering the northwest angle of the amphitheater to be 15 degrees west, in conjunction with a wall along the back of the stage that is solid from ground to overhang, with no cracks or gaps, would also reduce noise levels at the adjacent residences to levels meeting the County's 49 dBA L_{50} threshold. Amplified music would be reduced to 39 to 49 dBA, while amplified speech would be reduced to 38 to 48 dBA.

4. Installation of an eight-foot tall sound wall or specially-designed barrier along the eastern boundary of the park, along the existing driveway, would adequately shield the existing residences from amplified music and speech generated at the stage of the amphitheater. The proposed barrier should be continuous from grade to top, with no cracks or gaps, and have a minimum surface density of three lbs/ft^2 (e.g., one-inch thick marine-grade plywood, ½-inch laminated glass, concrete masonry units (CMU)). The approximate location of the barrier is shown in Figure 2. The total length of the barrier would be about 140 feet long, starting at the northern boundary of the residence and extending south, just beyond the residential property line. The installation of this eight-foot barrier would reduce noise levels generated by amplified music to 38 to 48 dBA and would reduce noise levels generated by amplified speech to 37 to 47 dBA.

FIGURE 2 Proposed Barrier Along the Eastern Boundary of the Park



The implementation of one of the above options would reduce the impact to a less-than-significant level.

The proposed site plan, dated July 7, 2020, would not result in additional noise impacts.

♦ ♦ ♦

If you have any questions or comments regarding this analysis, please do not hesitate to call.

Sincerely,

Carrie J. Janello
Senior Consultant
Illingworth & Rodkin, Inc.