



Proposed Mitigated Negative Declaration

Publication Date: March 10, 2021
Public Review Period: March 10, 2021 to April 12, 2021
State Clearinghouse Number: #####
Permit Sonoma File Number: **UPC18-0030**
Prepared by: Shawna Brekke-Read at
Phone: (510) 845-7549

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

Project Name:	UPC18-0030, Node Labs, Inc. Commercial Cannabis
Project Applicant/Operator:	Christopher Leavitt
Project Location/Address:	205 Deer Creek Lane
APN:	019-260-007
General Plan Land Use Designation:	Land Extensive Agriculture
Zoning Designation:	(LEA), Riparian Corridor Combining Zone (RC), and Scenic Resources Combining Zone (SR)
Decision Making Body:	Sonoma County Board of Zoning Adjustments
Appeal Body:	Sonoma County Board of Supervisors
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		No
Agricultural & Forest Resources	AG		No
Air Quality	AIR		No
Biological Resources	BIO	Yes	
Cultural Resources	CUL	Yes	
Energy	ENE		No
Geology and Soils	GEO		No
Greenhouse Gas Emission	GHG		No
Hazards and Hazardous Materials	HAZ		No
Hydrology and Water Quality	HYDRO		No
Land Use and Planning	LU		No
Mineral Resources	MIN		No
Noise	NOISE		No
Population and Housing	POP		No
Public Services	PS		No
Recreation	REC		No
Transportation	TRAF		No
Tribal Cultural Resources	TCR	Yes	
Utilities and Service Systems	UTL		No
Wildfire	WILD		No
Mandatory Findings of Significance			No

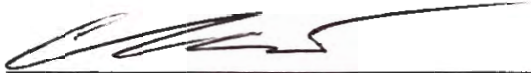
RESPONSIBLE AND TRUSTEE AGENCIES

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
State Water Resources Control Board	Cannabis Cultivation General Order	Porter-Cologne Water Quality Control Act

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 measures into the project plans.



Prepared by: Shawna Brekke-Read

Date: March 10, 2021

Christopher Leavitt CSO, Lab Director 3/8/21

[Applicant name and affiliation]

Date:



County of Sonoma
Permit & Resource Management Department

Initial Study

I. INTRODUCTION:

Node Labs, Inc proposes a commercial cannabis nursery operation involving indoor cannabis nursery in an existing barn on a mostly undeveloped parcel. A referral letter was sent to the appropriate local, state, and interest groups who may wish to comment on the project.

This report is the Initial Study required by the California Environmental Quality Act (CEQA). The report was prepared by Shawna Brekke-Read, Project Planner with MIG. Information on the project was provided by Christopher Leavitt of Node Labs, Inc, and Kelley Keogh of Greeneye Partners. Other reports, documents, maps and studies referred to in this document are available for review at the Permit and Resource Management Department (Permit Sonoma)

Please contact Shawna Brekke-Read, Project Planner, at (510) 845-7549 for more information.

II. EXISTING SETTING

The operation would be located at 205 Deer Creek Lane, Petaluma on a mostly undeveloped 60.58-acre parcel zoned Land Extensive Agriculture (LEA), B6 60 Combining District, Riparian Corridor Combining Zone (RC100/50) and Scenic Resource Combining District (SR). The project is located approximately 2.20 miles from the center of Petaluma. Figure 1 shows the location of the project site and vicinity.

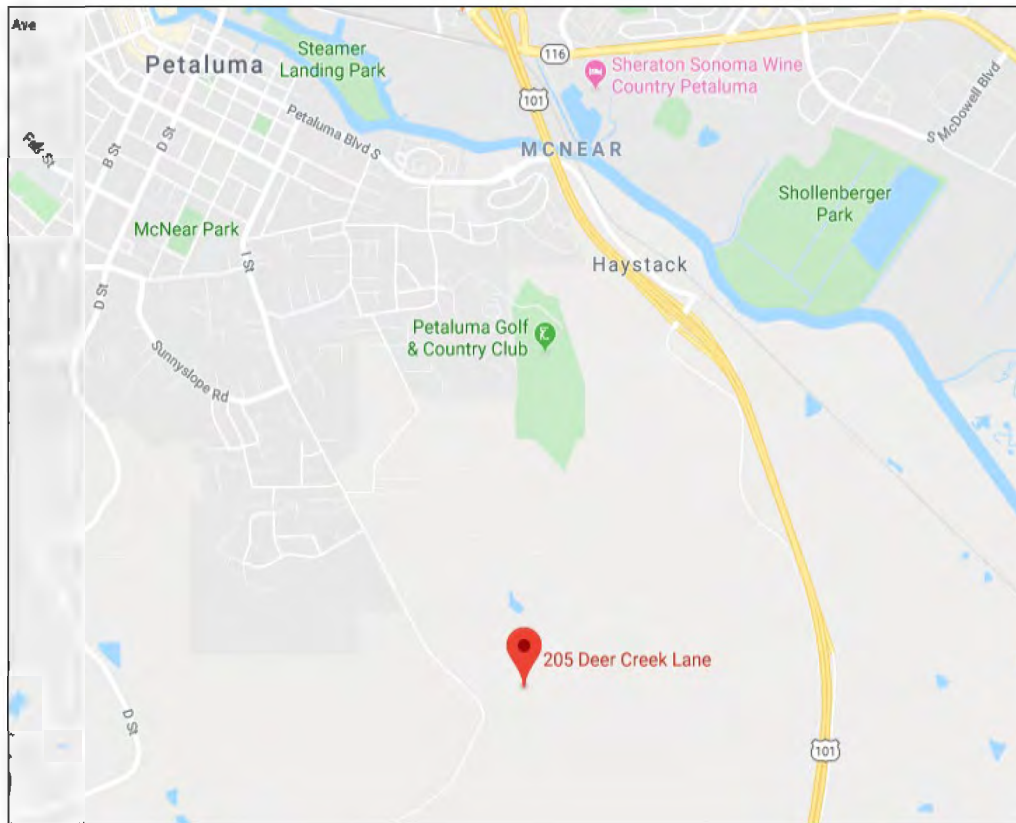
III. PROJECT DESCRIPTION

The applicant, Node Labs, Inc., proposes a Use Permit for 2,000 square feet of indoor cannabis nursery in a 2,000-square foot agricultural structure (barn) on a 60.58-acre mostly undeveloped parcel (see Figure 2). The agricultural structure (barn) is on an existing elevated gravel pad that is approximately 36 inches above native soil and extends roughly 10-15 feet beyond the barn in all directions. The proposal includes the construction of supporting infrastructure and would require a small amount of ground-disturbing activities (e.g., grading/trenching, excavation and fill) for a new 100 square-foot ADA-compliant bathroom on an existing gravel pad and associated water/wastewater hookups (2,500 gallon water storage tank and proposed fire hydrant). The proposal includes operational hours of 9:00 AM to 6:00 PM Monday through Friday. The operation would employ four full-time employees. The site would be closed to the public and does not contain any retail components. The project would be in a scenic landscape unit designated by the Sonoma County General Plan.¹

The project parcel has a Riparian Corridor designated by the Sonoma County General Plan and a portion of the site along the eastern property line has a Community Separator designated by the Petaluma Dairy Belt Area Plan.²

¹ Sonoma County General Plan 2020 Open Space Map: Santa Rosa and Environs, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/General-Plan/Open-Space-Scenic-Santa-Rosa-and-Environs/>, accessed 4/18/19.

² Petaluma Dairy Belt Area Plan, revised 2008,

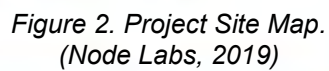


*Figure 1. Project Vicinity Map.
(Google Maps)*

Existing Uses: The parcel currently has a single dwelling residential unit and an agricultural barn that is being used for unpermitted indoor cannabis nursery. The applicant is going through the Use Permit process to make the cannabis operation legal. The existing barn on site is currently being used as a cannabis nursery under the Sonoma County Penalty Relief Program. The site also contains a fruit tree orchard near the residence and a vegetable garden near the barn. In the past, the pasture has been rented out at various times for livestock and has the potential to house livestock again. The parcel was created by a subdivision approved by Sonoma County in 2005 (MNS05-0022). The site is surrounded by rural, low density residential.

Topography and Drainage: The project site slopes from the northwest to the southeast and from the southeast to the northwest converging on Deer Creek, which intersects the site along its southwest boundary. Deer Creek flows northeasterly across the site along its northern boundary. The parcel has a high elevation point of approximately 505 feet near the southernmost point and a low elevation of approximately 175 feet along Deer Creek as it flows off the site. The slope goes down from the high point in the south to the low point in the north. The location of the barn is relatively flat.

Vegetation: The majority of the project site is located in non-native annual grassland and non-native forbs. Deer Creek, which is in the Petaluma River Watershed, runs through the parcel, approximately 180 feet north of the proposed development. Additionally, there is a non-jurisdictional drainage ditch adjacent to the barn. Figure 3 shows the project boundaries in more detail.



Proposed Buildings and Uses: The project proposes to convert an existing 2,000-square foot single-story barn for a commercial cannabis nursery operation, as described below, and to construct a new 100-square foot ADA compliant bathroom adjacent to the barn. The restroom would be located on the elevated gravel pad that is approximately 36-inches above native soil.

Full-time employees: 4

Hours of operation: 9:00 am to 6:00 pm, Monday through Friday. Due to the nature of cannabis nursery, additional hours of work are anticipated. The operation is allowed to operate 24/7, as needed.

Parking: All parking would be done on-site.

- Employees and clients: Large gravel parking area directly to the east of the barn.

Access: All access and egress for vehicles and trucks would be via a private driveway directly off Deer Creek Lane. The access road (I Street) is approximately 20 feet in width. The parcel has a driveway that is 0.8 feet of compacted class 2 aggregate and has a 40' turnaround at the end of the existing driveway.

Sewage Disposal: Nursery wastewater disposal: Process wastewater (PW) from the nursery operation would be directed to a 250-gallon waste tank. The tanks are then picked up by an agricultural waste hauler and disposed of at a wastewater plant.

Domestic wastewater disposal: Sanitary sewage would be provided via the existing on-site septic system. The septic system is approximately 1,500 gallons.

Water supply: Water is supplied to the barn from an existing on-site well, which would be the sole source of water for project needs. The operation would require a small quantity of sterile water which would be created from equipment utilizing reverse osmosis on site. The existing water well is located approximately 840 feet east of the southern tip of the parcel. The well also supplies water to the residence. Four residential properties situated along Deer Creek Lane including the project site obtain water from the domestic well.

Energy Supply: The project would comply with the Ordinance No. 6245 and purchase 100% renewable power from EverGreen-Sonoma Clean power through PG&E.

Waste management: Cannabis waste product would be not composted on site. The green waste from the cannabis would be transported to the Redwood Landfill. The holding area for all waste shall comply with the requirements put in place by Sonoma County for storing waste in durable non-absorbent, water-tight, easily cleaned containers. Node Labs would self-haul to the local waste facility, Recology. There would be no long-term onsite waste storage.

Construction: The construction schedule has not been determined.

DETAILED PROJECT DESCRIPTION

Nursery Operation

The proposed project operation would take place within the existing 2,000-square foot barn and would include three rooms dedicated to nursery operations (a Transfer Room, a Growth Chamber, and a Cloning and Stock Room), plus three support rooms (a Gowning Room, a Media Prep Room, and room for Shipping/Receiving/Lockers), and an Office. Total indoor operations (including nursery area) would be approximately 2,000 square feet.

The indoor nursery operation would involve tissue culture and micropropagation techniques and would occur in four phases: Initiation, Multiplication, Rooting, and Acclimation. Depending on volume and scheduling, all phases could be operating concurrently.

Initiation consists of dissecting cuttings of a plant from a client and decontaminating, using soap and bleach. These cuttings are then placed onto sterile gel media in a sealed plastic container. This stage takes approximately two weeks.

Multiplication consists of further dissection of the more developed plantlet to increase the amount of plants. This stage takes approximately two weeks. Multiplication takes place in the growth chamber.

Rooting consists of placing the cuttings onto special gel media that induces the roots to form. This stage takes approximately two weeks.

Acclimation consists of taking the rooted plant and placing it under strong light conditions so it would be better prepared for an outside environment. This stage takes approximately two weeks.

The growth chamber would include six growth racks (measuring 18 square feet per rack) for initiation, multiplication, and rooting stage plantlets. These plantlets would be grown under 13-watt LEDs. Each shelf would use two 13-watt light fixtures and five racks to facilitate growth. Acclimatizing plants are grown under T5 lights with 60-watt LED lamps on an additional two racks, each rack consisting of six shelves with six light fixtures each. The plants would be exposed to 18 hours of light every day. ("Nighttime" conditions would occur during the remaining six hours of each day.) Approximately 120 LED lights would be used in this room.

The nutrient solution medium for inducing rooting in the cuttings would be made in the media preparation room. The nutrient solution would be produced by combining powdered nutrients and reagents in boiling water and then sterilized in an autoclave. Once sterilized, the medium would be brought into the transfer room, which is a Class 100,000 cleanroom. This room has laminar flow hoods that are required to maintain a sterile environment. (Laminar airflow is designed to keep air moving in the same direction at the same speed.)

As described above, each stage takes approximately two weeks to complete, with a total time a plant cutting is grown until transportation to an offsite client of about three months.

Security

The Sonoma County Commercial Cannabis Ordinance requires each applicant to supply a site security plan, Sec 26.88.254(f)(21). The applicant has supplied a security plan which addresses restricting access to the indoor nursery area. The barn currently has locking doors to prevent free access. The property has a fully fenced perimeter securing the full 60.5-acre parcel where access is through an automatic security gate.

The applicant would install motion-sensor security cameras, and motion-sensor lighting. There would be no weapons on site.

The security cameras would be high-resolution and installed around the perimeter of the barn and within the nursery which would be monitored regularly.

Parking Lot and Landscaping

The parcel has an existing gravel parking area and several overflow parking spaces directly adjacent to the indoor nursery location, east of the barn. There is no proposed landscaping plan because the existing barn is currently screened by existing vegetation from the public road (I Street).

IV. SETTING

This area is a largely rural area located in Sonoma County, south of Petaluma. The site is surrounded by a low-density residential area, bordered by established trees. The current use of the parcel is a single dwelling residential unit, unpermitted indoor cannabis nursery in an existing barn and agricultural gardens. The parcel would be serviced by an existing private septic system and an existing domestic well. Uses on the neighboring properties include residences to the northeast, and undeveloped land to the south, west and east.

V. ISSUES RAISED BY THE PUBLIC OR AGENCIES

A referral packet was drafted and circulated to inform and solicit comments from selected relevant local and state agencies; and to special interest groups that were anticipated to take interest in the project.

As of April 22, 2019, the project planner received thirteen (13) responses to the project referral from: PRMD Building Division, Sonoma County Public Health Division Environmental Health & Safety Program, PRMD Natural Resources Geologist, PRMD Project Review Health Specialist, PRMD Fire and Emergency Services Department, Sonoma County Department of Transportation & Public Works, the Northwest Information center, Department of Fish and Wildlife, San Francisco Bay Regional Water Quality Control Board, Lytton Rancheria, Stewarts Point Rancheria, and Graton Rancheria. The referral responses included several requests for further information and project use permit conditions of approval. Upon permit application intake on May 30, 2018, Permit Sonoma determined an early neighborhood notification was not needed for this project. On July 17, 2018, a neighborhood notification of a complete application, was distributed to residents within 300 feet of the subject property line. The project planner has received no public comments on the proposed project.

VI. OTHER RELATED PROJECTS

Three other applicants have submitted cannabis cultivation applications within five miles of the project site, ranging from 10,000 to 21,750 square feet. APC19-0002 and APC17-0019 have been issued by the Agriculture Department. UPC17-0080 is currently being processed through the County cannabis permit program and is operating under the Penalty Relief Program.

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.

Potentially Significant Unless Mitigated: The project would have the impact described, and

the impact could be significant. One or more mitigation measures have been identified that would 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 insignificance 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. Reports, documents, maps and studies referred to in this document are available for review at the Permit and Resource Management Department (Permit Sonoma)

The Project Applicant 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, notify all contractors, agents and employees involved in project implementation and any new owners should the property be transferred to ensure compliance with the mitigation measures.

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:

A small portion of the project parcel (the southeast corner) is within a Scenic Resource combining district; the northern parcel border is adjacent to a Scenic Resource combining district. However, the project site is approximately 415 feet south of the Scenic Resource-designated area to the north, and is not located within it. The project site vicinity is generally characterized by its rural quality, with ranch land and the occasional residences.

The project site is northeast of the intersection of Deer Creek Lane and I Street. The project site is adjacent to (north of) Deer Creek Lane. The terrain along Deer Creek Lane in this area is generally flat. The slope of the project site location is close to 0%. Approximately 400 feet north of Deer Creek Lane, the terrain begins to exhibit gradual rolling hills with visible slopes and scattered trees on the hilltops.

Views of the project site would not be visible from several vantage points along I Street due to existing vegetation (see Figures 4, 5 and 6).

The project site is currently developed with the existing barn, and there would be no future construction of major structures. Where visible, the existing barn and associated accessory bathroom blends in with the scenery and does not attract attention due to its size, form, color, texture, and would not overall represent a visually distinctive change to the site. Because the project site is not located on top of a hill and the existing structure is located at the lowest buildable elevations on the project site, the existing barn is mostly screened from view by existing vegetation

The General Plan Open Space and Resource Conservation Element (p. OS-23) includes Goal OSRC-6, which states: *"Preserve the unique and rural and natural character of Sonoma County for residents, businesses, visitors and future generations."* General Plan Policy OSRC-6a includes design principles related to how consideration and treatment of landscaping, paved areas, and

exterior lighting and signage can be applied to help structures “blend in with the surrounding landscape.” (p. OS-23)

The Petaluma Dairy Belt Area plan (pp. 19-20) provides standards to be considered in the design of projects:

- 1) *“Protect the visual quality of unique scenic resources;*
- 2) *Protect and maintain scenic areas essential for defining community;*
- 3) *Protect visually vulnerable landscapes, such as ridgelines;*
- 4) *Maintain scenic resources as an attraction for tourism and recreation;*
- 5) *Review new developments to minimize their impact or scenic quality.”*



Figure 4. View looking northeast from I Street at Deer Creek Lane.
Project is located behind tree line.
(Google Maps street view)



*Figure 5. View looking east from I Street,
about 450 feet east from the indoor nursery site.
Project is located behind tree line.
(Google Maps street view)*



*Figure 6. View looking southeast from I Street,
About 750 feet from the project site.
Project is located behind tree line.
(Google Maps street view)*

The project would comply with County Zoning Regulation Section 26-88-254 (Cannabis Cultivation-Commercial), which specifies that structures associated with cultivation must meet the applicable zoning district's setbacks, cannot be in the front yard setback, must be screened from public view, and, within agricultural and resource zones, must be setback a minimum of six hundred feet (600') from a school providing education to K-12 grades.

The visual character of the existing undeveloped site would not be changed because there is no

proposed major construction of structures that would contrast with (stand out against) existing conditions. The existing barn, which was built with agriculture intentions, is consistent with the surrounding landscape and character of that area. Additionally, the proposed project is located at the lowest buildable point on the parcel, thus not obstructing scenic views of the landscape.

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 not located on or visible from a state scenic highway. The nearest state scenic highway to the project site is Highway 116 in Petaluma, approximately two miles to the north.³

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 existing visual character of the site and its surroundings is rural, primarily for agricultural and related uses. As discussed in section 1.a, the project: (1) would be consistent with the land use designation for the site (LEA), (2) is located in a SR (Scenic Resources) combining district, community separator, (3) is proposing minor construction, and (4) would not remove any trees. The project would be in conformance with Section 26-88-254(f)(4) and (5) of the Sonoma County Code and meets the setbacks for indoor nursery.

Based on the County "Visual Assessment Guidelines," the project site sensitivity would therefore be considered "Moderate" because:

*"The site or portion thereof is within a rural land use designation or an urban designation that does not meet the criteria above for low sensitivity, but the site has no land use or zoning designations protecting scenic resources. The project vicinity is characterized by rural or urban development but may include historic resources or be considered a gateway to a community. This category includes building or construction sites with visible slopes less than 30 percent or where there is significant natural features of aesthetic value that is visible from public roads or public use areas (i.e. parks, trails etc.)."*⁴

As previously mentioned, the project proposes minor construction of an ADA compliant bathroom and proposed cannabis nursery operations would take place entirely within existing structures on the site. The project is also not located on a ridgeline and is placed at the lowest portion of the parcel. Based on County "Visual Assessment Guidelines," the project's visual dominance would be considered "Inevident" because:

*"Project is generally not visible from public view because of intervening natural landforms or vegetation."*⁵

³ Caltrans, Scenic Highways, <http://www.dot.ca.gov/design/lap/livability/scenic-highways/>, accessed 4/22/19

⁴ Sonoma County Permit and Resources Management Department, "Visual Assessment Guidelines," Table 1 - Site Sensitivity, pages 3-4.

⁵ Ibid., Table 2 - Visual Dominance, page 4.

The project's visual effect on the visual character or quality of the site and its surroundings was determined based on County "Visual Assessment Guidelines," Table 3- Thresholds of Significance for Visual Impact Analysis⁶:

**Table 3
Thresholds of Significance
for
Visual Impact Analysis**

Sensitivity	Visual Dominance			
	<i>Dominant</i>	<i>Co-Dominant</i>	<i>Subordinate</i>	<i>Inevident</i>
<i>Maximum</i>	Significant	Significant	Significant	Less than significant
<i>High</i>	Significant	Significant	Less than significant	Less than significant
<i>Moderate</i>	Significant	Less than significant	Less than significant	Less than significant
<i>Low</i>	Less than significant	Less than significant	Less than significant	Less than significant

Considering the project site's "Moderate" visual sensitivity and the project's "Inevident" visual dominance, the Project would be considered to have a "less than significant" effect on the existing visual character or quality of the site and its surroundings.

Significance Level: Less Than Significant Impact

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

Comment:

Pursuant to County Code § 26-88-254, all lights for the indoor nursery areas would be fully contained in the structure and would be contained so that no light escapes the structure. Security lighting would be fully shielded, downward casting to prevent spill over into other structures, properties, or the night sky. The lights would not escape at levels visible to surrounding properties between sunset and sunrise. For lighting, the indoor cultivation operation utilizes the following types of lights: motion sensor security lights, 13-watt LED lights in the Growth Chamber and 60-watt LED lights for the acclimating stage. As a result, nighttime lighting spillage from security lighting would be minimal.

The Project would be required to comply with Zoning Regulation Section 26-88-254(f)(14) which requires all lighting to be fully shielded, downward casting and not spill over onto structures, other properties or the night sky. All indoor and mixed light operations shall be fully contained so that little to no light escapes. Light shall not escape at a level that is visible from neighboring properties between sunset and sunrise.

Overall, lighting provisions incorporated into the project's design would ensure that lighting has a less-than significant impact on nighttime view in the area.

⁶ Ibid., Table 3 - Thresholds of Significance for Visual Impact Analysis, page 6.

Significance Level: Less Than Significant Impact

2. AGRICULTURE AND FOREST RESOURCES:

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

Would the project:

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

Comment:

The parcel is designated by the Sonoma County Permit Sonoma GIS Cannabis Site Evaluation Tool⁷ as Grazing Land (the site of the nursery operation is within the Grazing Land). The proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance because the parcel is not designated as farmland.

Significance Level: No Impact

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

Comment:

The project site is zoned as Land Extensive Agriculture District, whose purpose is to enhance and protect lands capable of and generally used for animal husbandry and the production of food, fiber, and plant material.⁸ The project would take place in an existing structure that would not deplete existing natural resources. The project site is not under a Williamson Act Contract.

Significance Level: Less Than Significant Impact

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

Comment:

The project site is not in a Timberland Production zoning district as designated by the Land Cover map of the California Department of Forestry and Fire Protection.⁹ The project would not cause a rezoning of forest land.

⁷ Sonoma County Permit Sonoma GIS Site Evaluation Tool, <http://sonomamap.maps.arcgis.com/apps/webappviewer/index.html?id=0b784d90045941798d780f288b6f7003>, accessed 4/24/19.

⁸ Sonoma County General Plan 2020 Land Use Element, Natural Resource Land Use Policy, Policy for Resources and Rural Development Areas, LU 67-68, <http://sonomacounty.ca.gov/WorkArea/DownloadAsset.aspx?id=2147542561>, accessed 4/24/19

⁹ California Department of Forestry and Fire Protection, "Land Cover Map," http://frap.fire.ca.gov/data/frapgismaps/pdfs/fvegwhr13b_map.pdf, accessed 4/24/19

Significance Level: No Impact

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

Comment:

As discussed in section 2.c, the project would not result in the loss of forest land or conversion of forest land to non-forest use. Though the parcel is surrounded by trees, the project site where the nursery operation is located is categorized as grassland. The project does not propose to remove any trees.

Significance Level: Less Than Significant 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 site is designated as Grazing Land, as shown on the Cannabis Site Evaluation GIS Tool created by Permit Sonoma.¹⁰ The project would involve minor construction such as trenching and grading for the proposed bathroom, proposed fire hydrant and proposed water storage tank. The project is located on previously disturbed land and would not convert farmland to non-agricultural use or conversion of forest land to non-forest use.

Significance Level: Less than Significant Impact

3. AIR QUALITY:

Where available, 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 proposed project is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which is currently designated as a nonattainment area for state and federal ozone standards, the state PM₁₀ standard, and the state and Federal PM_{2.5} standard. The District has adopted an Ozone Attainment Plan and a Clean Air Plan in compliance with Federal and State Clean Air Acts. The following discussion considers whether the proposed project would conflict with or obstruct implementation of an applicable air quality plan maintained by this air district.

In April 2017, the BAAQMD adopted its *2017 Clean Air Plan: Spare the Air, Cool the Climate (Clean Air Plan)*, which provides the BAAQMD's framework for ensuring air quality standards would be attained and maintained in the Bay Area in compliance with state and federal requirements (BAAQMD 2017c). The BAAQMD's 2017 *Clean Air Plan* is a multi-pollutant plan focused on protecting public health and the climate. Specifically, the primary goals of the 2017 Clean Air Plan are to:

¹⁰ Sonoma County Permit Sonoma GIS Site Evaluation Tool, <http://sonomamap.maps.arcgis.com/apps/webappviewer/index.html?id=0b784d90045941798d780f288b6f7003>, accessed 4/24/19

- Attain all state and national quality standards;
- Eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Reduce Bay Area GHG Emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050.

The *Clean Air Plan* includes emission inventories and plans for achieving attainment of air quality standards. Chapter 5 of the *Clean Air Plan* contains BAAQMD's strategy for achieving the plan's climate and air quality goals, and identifies 85 distinct control measures designed to comply with state and federal air quality standards and planning requirements, protect public health by reducing emissions of ozone precursors, PM, and TACs, and reduce greenhouse gases (GHG) emissions. These 85 control measures are grouped by nine economic-based "sectors": Agriculture, Buildings, Energy, Natural and Working Lands, Stationary Sources, Super GHGs, Transportation, Waste, and Water. Most of the control measures would be implemented at the local and regional level by municipal government and the BAAQMD, and thus are not directly applicable to the proposed project. The proposed project would not conflict with or obstruct implementation of the BAAQMD *Clean Air Plan* because: 1) it does not include significant sources of ozone precursor emissions, PM, or TACs; 2) it would not exacerbate or increase disparities in cancer risks from TAC emissions; and 3) the project is required, pursuant to the County Code Section 26-88-254(g)(3), to provide electrical power through a combination of on-grid 100 percent renewable energy, an on-site zero net energy renewable energy system, or purchase of carbon offsets for power obtained from non-renewable resources, which would reduce GHG emissions from the project consistent with state reduction goals (see also Section 7, Greenhouse Gas Emissions, in this Initial Study).

Significance Level: Less than Significant Impact

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

Comment:

State and Federal standards have been established for the "criteria pollutants": ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide and particulates (PM₁₀ and PM_{2.5}). The pollutants NO_x (nitrogen oxides) and reactive organic gases (ROG) from ozone in the atmosphere in the presence of sunlight. The principal source of ozone precursors is vehicle emissions, although stationary internal combustion engines are also considered a source.

The proposed project is located within the jurisdiction of the BAAQMD. The project is not included in the BAAQMD Air Quality Guidelines screening criteria; however, a general comparison can be made with a similar land use. The BAAQMD's *CEQA Air Quality Guidelines* contain screening criteria to provide lead agencies with a conservative indication of whether a proposed project could result in potentially significant air quality impacts. Consistent with the BAAQMD's guidance, if a project meets all the screening criteria, then the project would result in a less than significant air quality impact and detailed air quality assessment is not required for the project.

In general, cannabis-related facilities are not a land use type identified in the BAAQMD *CEQA Air Quality Guidelines* screening criteria (BAAQMD, 2017, Table 3-1 page 3-5); however, a general comparison can be made with similar land use with similar emission sources (e.g., area sources such as heating, energy use, vehicular sources of emissions). The BAAQMD "general light industry" land use screening threshold was used for this air analysis. This land use type is based on the description in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, and is defined as (CAPCOA, 2017), "free standing facilities devoted to a single use. The facilities have an emphasis on activities other than manufacturing and typically have minimal office space." The "general light industry" land use has a screening size of 541,000 square feet (541 ksf) for operational criteria pollutants, and a screening size of 259 ksf for construction related pollutants the project includes

minor construction of a 100 square foot ADA bathroom. Project plans show a total square footage of approximately 2,100 square feet, which is less than 1 percent of the screening size for operation related pollutants.

Short-Term Construction Emissions: Project construction of the 100 square foot bathroom would generate short-term equipment exhaust and minimal fugitive dust emissions from ground disturbance, construction equipment use, worker vehicle trips, and/or material deliveries associated with activities such as site preparation, minimal grading, building/structure construction and interior building structure remodeling.

Because the project would not exceed screening criteria for ROG and NO_x (BAAQMD Air Quality Guidelines Table 3-1), a detailed air quality study was determined not to be required. In addition, a detailed air quality analysis was not required for localized CO concentrations because traffic generated by the project would not increase traffic volumes at the nearest affected intersection (Deer Creek Lane and I Street) above the BAAQMD screening criterion (more than 44,000 vehicles per hour). The applicant submitted trip generation form indicates an average of 21 daily trips, well below the 44,000 vehicles per hour mark.

The project would not have a cumulative effect on ozone because it would not generate substantial traffic that resulted in substantial emissions of ozone precursors (ROG and NO_x). As discussed above, the project would have no long-term effect on PM_{2.5} and PM₁₀ because there would be little to no dust generated from the project.

Therefore, although the project would generate some ozone precursors from new vehicle trips, traffic generation from the project would be lower than BAAQMD screening criteria, and emissions of ozone precursors (ROG and NO_x) from project traffic would not result in a cumulative effect on ozone, nor would the proposed project require substantial ground disturbing activities such as major grading or construction, impacts would be less than significant.

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 site is located in a rural area, with the neighboring residential houses located at least 600 feet from the site. Based on the analysis in section 3.a and 3.b, the proposed project does not include significant stationary, mobile, or other sources of emissions. In addition, the proposed project would comply with the property setbacks contained in Section 26-88-254 of the County Code, which require structures used for indoor cultivation (including for cannabis nursery) to meet minimum zoning setbacks in agricultural zones and be located at least 6000 feet from schools. The minimal project emissions sources and distance between the proposed facilities and any nearby sensitive receptors would ensure that project construction and operation would not result in substantial concentrations of criteria air pollutants or TACs at sensitive receptor locations.

Significance Level: Less than Significant Impact

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

Comment:

According to the Sonoma County 2016 Medical Cannabis Land Use Ordinance Negative Declaration (pg. 20), the project is considered an odor generating use by the county, with the potential for "a strong odor...during the final phase of the growing cycle (typically in late Summer, early Fall)."

Although this type of project is not included in the BAAQMD Guidelines (Table 3-3, Odor Screening Distances), BAAQMD recommends a minimum one-mile screening distance for certain project types (i.e., food processing facilities, feed lots and dairies, green water and recycle operations). However, BAAQMD does not intend these distance guidelines “as absolute screening criteria, rather as information to consider along with odor parameters” (BAAQMD Guidelines, p.3-4).

Regardless, the County has determined that because the project is odor generating and within the minimum one-mile screening distance, “a public nuisance may be deemed to exist if the cultivation produces odors which are disturbing to people of normal sensitivity residing or present on adjacent or nearby property or areas open to the public” (2016 ND, p. 20).

The operation would take place in an existing structure that would incorporate Cleanseal 800 HEPA filters which are designed for class 10 through class 100,000 cleanroom spaces which would filter airflow over the growth chamber within the existing barn. The project would not process, manufacture or plant cannabis outdoors, but instead would cultivate small unflowered cuttings (plantlets) which in this stage, have minimal to no odor.

There are no sensitive receptors in the project vicinity. The ordinance development criteria states that property setbacks must be 600 feet from a school providing education to K-12 grades and that “*All indoor cultivation operations and any drying, aging, trimming and packing facilities shall be equipped with odor control filtration and ventilation systems(s) to control odors...*” As mentioned in 3.c, all off-site residences are at least 600 feet from the proposed indoor cultivation area. Therefore, impacts to neighboring sources due to odor would be less than significant.

Significance Level: Less than Significant Impact

4. BIOLOGICAL RESOURCES:

A Biological Technical Report was prepared on May 11, 2018 by Marisa Ishimatsu for Node Laboratories (Applicant). The purpose of the assessment was to identify special-status plant and wildlife species and sensitive habitats (including wetlands and drainages) that have the potential to occur on or in the vicinity of the property. Based on information and data collected for the analysis, impact mitigation measures were provided to minimize and/or avoid potential biological resource impacts. The report was reviewed by MIG biologists to verify its adequacy, completeness, and accuracy for use as the basis of the following biological resource impact analysis.

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?**

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 the 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 U.S. Fish and Wildlife Service (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 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.

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 USFWS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out would 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 would 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.

Migratory Bird Treaty Act of 1918 (MBTA)

The Federal Migratory Bird Treaty Act (MBTA) (16 USC. 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that cause nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

State

California Endangered Species Act (CESA)

Provisions of CESA protect state-listed threatened and endangered species. The California Department of Fish and Wildlife (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 (CFGF), but CDFW has interpreted "take" to include the killing of a member of a species which is the proximate result of habitat modification.

California Fully Protected Species and Species of Special Concern

The classification of California “fully protected” (CFP) 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 biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under the CEQA during project review.

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 Section 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 CFGC.

Other Special-Status Plants – California Native Plant Society

The California Native Plant Society (CNPS), a non-profit plant conservation organization, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (<http://www.cnps.org/cnps/rareplants/inventory/>).

The Inventory employs the California Rare Plant Ranking (CRPR) to assign plants to the following categories:

- 1A Presumed extinct in California
- 1B Rare, threatened, or endangered in California and elsewhere
- 2 Rare, threatened, or endangered in California, but more common elsewhere
- 3 Plants for which more information is needed – A review list
- 4 Plants of limited distribution – A watch list

Additional endangerment codes are assigned to each taxon as follows:

- 1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat)
- 2 Fairly endangered in California (20-80% occurrences threatened)
- 3 Not very endangered in California (<20% of occurrences threatened, or no current threats known)

CRPR 1A, 1B, and 2 plants consist of individuals that may qualify for listing by state and federal agencies. As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the Native Plant Protection Act (NPPA) and Sections 2062 and 2067 of the CFGC. CRPR 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents.

Native Plant Protection Act (NPPA)

The NPPA was created in 1977 with the intent to preserve, protect, and enhance rare and endangered plants in California (CFGC Sections 1900 to 1913). The NPPA is administered by CDFW, which has the authority to designate native plants as endangered or rare and to protect them from “take.” CDFW maintains a list of plant species that have been officially classified as endangered, threatened or rare. These special-status plants have special protection under California law and projects that directly impact them may not qualify for a categorical exemption under CEQA guidelines.

Comment:

The project site is located within the Petaluma watershed and consists of annual grassland and developed habitat. The annual grassland habitat is dominated by non-native annual grasses and non-native forbs, including common cat's ear (*Hypochaeris radicata*), rose clover (*Trifolium hirtum*), milk thistle (*Silybum marianum*), and woolly clover (*Trifolium tomentosum*). Grasslands on the project site are regularly mowed. The developed habitat consists of a house, barn, and gravel driveway.

A riparian corridor listed as an unnamed intermittent drainage in the applicant supplied biological report (also noted as Deer Creek in the hydrogeological report) runs through the parcel, approximately 180 feet north of the proposed project site. This drainage is 90% shaded by coast live oak (*Quercus agrifolia*) and California bay laurel (*Umbellularia californica*). Water was present at the time of the site visit on May 11, 2018 by Ms. Ishimatsu, though water does not persist through the summer.

The topography of the parcel is generally flat with slight slopes near the riparian area and at the top of the driveway. The area where the proposed project would occur is relatively flat.

Special-Status Species

A search of resource agency database records (e.g., CDFW's California Natural Diversity Database [CNDDDB], CNPS Electronic Inventory, and the USFWS Information for Planning and Consultation [IPaC] database) was conducted within the Petaluma, Petaluma Point, Petaluma River, Glen Ellen, Sonoma, Sears Point, Novato, San Geronimo, and Cotati USGS 7.5 minute quadrangles. The

potential occurrence of these species was then evaluated based on the habitat requirements of each species relative to the conditions observed during the habitat evaluation conducted by Ms. Ishimatsu on May 3, 2018. MIG conducted a follow up site visit on April 26, 2019 to confirm the potential presence of special-status plant and wildlife species and to conduct a focused special-status plant survey. A majority of the species identified during the database search do not have any potential to occur within the project site based on the lack of suitable habitat, the distance of the project site to previously recorded occurrences in the region, disturbed habitat conditions, and the absence of species-specific habitat requirements.

The following species were determined to have potential to occur within the project site based on general habitats types, CNDBB occurrences within a five-mile radius of the project site, and observations of site conditions made during the biological surveys. Potential impacts and associated impact avoidance, minimization, and mitigation measures are discussed below.

Special-Status Plant Species

Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened or endangered, (2) federal and state candidates for listing, (3) plants assigned a Rank of 1 through 4 by the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, section 15380.

Based on the results of the habitat assessment conducted by Ms. Ishimatsu, three plant species were initially identified as having potential to occur on the project site: congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *Congesta*), fragrant fritillary (*Fritillaria liliacea*), and Franciscan onion (*Allium peninsulare* var. *franciscanum*). The project site does not support habitats consisting of vernal pools, serpentine soils, freshwater marsh, and/or alkaline sites that would be suitable to support remaining species that were initially identified during the database search. An updated special-status plant species records search of CNDBB and CNPS Rare Plant Inventory and a focused special-status plant survey was conducted by MIG on April 26, 2019 to determine the presence or absence of the three potentially present plant species identified by Ms. Ishimatsu. The survey was conducted during the reported blooming periods of all three species and no special-status plant species were observed. Therefore, the project is not expected to result in adverse impacts to special-status plant species.

Significance Level: No Impact

Special-Status Wildlife Species

Special-status wildlife species include those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; California fully protected and species of special concern; non-game mammals protected by Sections 4150-4155 of the CFGC; and nesting birds protected by the CDFW under CFGC Sections 3503 and 3513.

Based upon the results of database searches and site reconnaissance conducted by Ms. Ishimatsu on May 11, 2018 and MIG on April 26, 2019, it was determined that the following wildlife species have potential to occur on the project site: American badger (*Taxidea taxus*), burrowing owl (*Athene cunicularia*), California red-legged frog (*Rana draytonii*), northern harrier (*Circus hudsonius* [= *cyaneus*]), pallid bat (*Antrozous pallidus*), western pond turtle (*Actinemys marmorata*), and white-tailed kite (*Elanus leucurus*). These species are discussed in detail below.

Burrowing Owl (California Species of Special Concern)

Burrowing owl occurs year-round throughout the southern half of California and is known to breed throughout much of northern California. Burrowing owl occurs in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Burrowing owls are

subterranean nesters and are dependent upon burrowing mammals, most notably, the California ground squirrel (*Otospermophilus beecheyi*). Burrowing owl may occur within the project site; however, no burrows were observed during the site visits.

Northern Harrier (California Species of Special Concern)

Northern harrier is found in open habitats throughout most of California, including freshwater and brackish marshes, grasslands, agricultural areas, and desert habitats. Harriers typically nest on the ground in open (i.e., treeless) areas in dense, relatively tall, vegetation, the composition of which can be highly variable.¹¹ Harriers are predatory and subsist on a variety of small mammals and other vertebrates. This species may forage over the open salt marsh, though forage within the disturbed ruderal grassland is likely to be limited due to rocky soil conditions and a general lack of small mammal sign observed. Tall marsh or ruderal vegetation suitable for this species is of marginal quality and is limited to the Study Area fringes. Northern harrier may utilize the grassland habitat on the margins of woodland surrounding the project site as nesting habitat.

White-Tailed Kite (California Fully-Protected Species)

The white-tailed kite is a year-round resident in California in lowland areas west of Sierra Nevada from the head of Sacramento Valley south, including coastal valleys and foothills, to western San Diego County at the Mexican border. White-tailed kite inhabits low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands that are used for foraging. White-tailed kite nests are generally found in the tops of trees approximately 20 to 50 feet tall, depending on availability of nesting sites. Live oaks are often the preferred tree for nesting. The majority of white-tailed kite nests are associated with woodland or forested areas with nearby water sources. Nesting sites can range from open-country, isolated trees, or along the edge of or within a forested area. Trees within the cultivation area may be utilized for nesting and grassland habitat within the project site may provide foraging habitat for this species.

Pallid Bat (California Species of Special Concern and Western Bat Working Group [WBWG] – High Priority)

The pallid bat is found in a variety of low elevation habitats throughout California. It selects a variety of day roosts including rock outcrops, mines, caves, hollow trees, buildings, and bridges. Night roosts are usually found under bridges, but also in caves, mines, and buildings. Pallid bats are highly sensitive to anthropogenic disturbance. Unlike most bats, pallid bats primarily feed on large ground-dwelling arthropods and are somewhat unique among local bats in that they may forage on the ground. There is moderate potential for this species to occur within the project site. The intermittent drainage within the project site and other sources of water within the general vicinity provide the required water source for pallid bats. Trees in the area may provide suitable roosting habitat for pallid bat as well.

Western Pond Turtle (California Species of Special Concern)

Western pond turtle (WPT) is a habitat generalist, inhabiting a wide range of fresh and brackish, permanent and intermittent water bodies from sea level to about 4,500 feet above sea level. Typically, this species is found in ponds, marshes, ditches, streams, and rivers that have rocky or muddy bottoms. WPT is most often found in aquatic environments with plant communities dominated by watercress, cattail, and other aquatic vegetation. WPT is a truly aquatic turtle that usually only leaves the aquatic site to reproduce and to spend its winter elsewhere. WPT may overwinter on land, in water, or may remain active in water during the winter season; this pattern may vary considerably with latitude, water temperature, and habitat type.

WPT also requires upland areas for burrowing habitat where it digs, nests, and buries its eggs.

These nests can extend from 52 feet to 1,219 feet from watercourses. Upland nest sites are usually

¹¹ Shuford, W. D. and Gardali, T. 2008. California Bird Species of Special Concern. Western Field Ornithologists and California Department of Fish and Game. Sacramento, CA.

found in areas with sparse vegetation. Sunny, barren, and undisturbed (not disked) land provides optimal habitat, while shady riparian habitat does not provide suitable habitat. Eggs are typically laid from March to August, with most eggs being laid in May and June. Hatchlings will stay in the nest until the following April. Predators of juvenile western pond turtles include the non-native bullfrog and Centrarchid fish (sunfish). This turtle is most visible between April and July when it can be observed basking in the sun. In areas where the water is very warm during these months, however, it will bask in the warm water and will be more difficult to observe. It eats plants, insects, worms, fish and carrion.

The intermittent drainage within the project site could provide suitable foraging habitat when the drainage has flowing water and the adjacent uplands could be used for refugia and dispersal. However, the grassland habitat is actively managed through periodic mowing. The short grass provides limited vegetation cover and no other refugia habitat is present in the project site.

California Red-Legged Frog (Federal Threatened, California Species of Special Concern)

California red-legged frog (CRLF) occurs in the lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Frogs require 11-20 weeks of permanent water for larval development and adults require access to nearby estivation habitat. The intermittent drainage could provide suitable foraging habitat when the drainage has flowing water and the adjacent uplands could be used for refugia and dispersal. However, the grassland habitat is actively managed through periodic mowing. The short grass provides limited vegetation cover and no other refugia habitat is present in the project site. Therefore, it is unlikely that CRLF would use the project site for refugia but could use it for dispersal.

Summary of Potential Impacts:

Nesting Birds

Vegetation in and adjacent to the project site has the potential to provide nesting habitat for species that are protected by the Migratory Bird Treaty Act of 1918 (MBTA) and the CFGC Sections 3503 and 3513 including raptors and other songbird species while nesting. There is potential for ground- and tree-nesting birds to establish nests in the project site prior to the onset of project construction. Destruction of or disturbance to an active nest is prohibited. Construction activities including site mobilization, vegetation clearing and grubbing, grading, and noise and vibration from the operation of heavy equipment have the potential to result in direct destruction (i.e., death or physical harm) and indirect (i.e., nest abandonment by adult birds and abandonment of chicks and/or eggs) impacts to nesting birds, result in mortality and/or adversely impacting nest success. This would be considered a significant impact pursuant to CEQA guidelines.

With the implementation of Mitigation Measure BIO-1, the project would result in a less-than-significant impact to special-status avian species known to occur in the regional vicinity including burrowing owl, northern harrier, and white-tailed kite, as well as nesting birds protected under the MBTA and CFGC.

Special-Status Bats

Trees on the project site can provide potential roosting habitat for various bat species known to occur in the region, including pallid bat described above. Vegetation clearing and construction activities within 50 feet of the project site may result in the direct removal or disturbance of hibernation or maternal roost sites. Removal of occupied roost habitat during the bat hibernation or maternity season may result in the harm, death, displacement of individual bats and/or the disruption of reproductive success of nursery colony roosts; these impacts would be considered potentially significant pursuant to CEQA guidelines. Implementation of Mitigation Measure BIO-2 would be required to reduce this potential impact to less than significant.

Special-Status Amphibians and Reptiles

Suitable breeding habitat for CRLF and WPT is not present within the project site. The intermittent drainage could provide suitable foraging habitat when the drainage is inundated and the adjacent uplands could be used for refugia and dispersal. However, the grassland habitat is actively managed through periodic mowing. The short grass provides limited vegetation cover and no other refugia habitat is present in the project site. Therefore, it is unlikely that CRLF would use the project site for refugia. However, adult CRLF may disperse through the project site, especially following precipitation events, and be impacted during construction activities. Implementation of Mitigation Measure BIO-3 would be required to reduce this potential impact to less than significant.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

Construction of supporting infrastructure for the commercial cannabis operation including a 100 square-foot ADA compliant bathroom, could result in the disturbance or destruction of special-status species or their habitat, through grading, equipment staging, and other site disturbances. Such effects could include the direct removal of individuals and disturbance and/or destruction of nesting and/or roosting sites. Therefore, the following measures are required to avoid or minimize project impacts on special-status species and habitat.

Mitigation Measure BIO-1: Nesting Birds

Pre-construction surveys for active nests of special-status birds or birds protected by the MBTA shall be conducted by a qualified biologist in all areas of the project site within 200 feet of Project disturbance, where accessible. Surveys shall be conducted within 14 days before commencement of any Project activities that occur during the nesting season (February 15 to August 31) in a given area.

If any active nests, or behaviors indicating that active nests are present, are observed, appropriate buffers around the nest sites shall be determined by a qualified biologist to avoid nest failure resulting from project activities. The size of the buffer would depend on the species, nest location, nest stage, and specific project activities to be performed while the nest is active. Typical ranges of nest buffers may be 50 feet for common species acclimated to human disturbance up to 500 feet for active raptor nests. The buffers may be adjusted if a qualified biologist determines construction activities would not be likely to adversely affect the nest. No project activity shall 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.

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 biologist¹² shall conduct a habitat assessment and

¹² A qualified biologist is an individual who possesses, at a minimum, a bachelor's or advanced degree, from an accredited university, with a major in biology, zoology, wildlife biology, natural resources science, or a closely related scientific discipline, at least two years of field experience in the biology and natural history of local plant, fish, and wildlife resources present at the cannabis cultivation site, and knowledge of state and federal laws regarding the

- preconstruction nesting survey for nesting bird species no more than seven (7) days prior to initiation of work. The qualified biologist conducting the surveys shall be familiar with the breeding behaviors and nest structures of birds known to nest in the project site. Surveys shall be conducted at the appropriate times of day during periods of peak activity (i.e., early morning or dusk) and shall be of sufficient duration to observe movement patterns. Surveys shall be conducted within the project area and 50 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 50 feet of non-raptor nests and 500 feet of raptor nests. Monitoring, by a qualified biologist, shall be required to insure 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 activity, as determined by the qualified biologist, shall be monitored daily during the duration of the Project 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. A report of the findings would 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) Prior to issuance of permits for ground disturbing activities, the applicant must submit evidence that the site has been surveyed by a qualified biologist to ensure that no active nest disturbance or destruction would occur as a result of the project. If necessary, nest protection buffers shall be fenced off and active nest monitoring would be initiated prior to permit issuance.

Mitigation Measure BIO-2: Special-Status Bat Species

A qualified wildlife biologist¹³ shall conduct a pre-construction bat survey of all trees and manmade structures located within 50 feet from the project footprint (where access is feasible) to determine if suitable roost habitat is present (e.g., snags, large trees, trees with cavities or flaking bark, leafy trees, abandoned or seldom-used buildings with suitable entry and egress points) and to search for evidence of bat use (e.g., guano, urine staining, smells associated with bats, sounds indicating bat presence). If no evidence of bat roosts are found, then no further action is required.

protection of sensitive and endangered species.

¹³ A qualified biologist is an individual who possesses, at a minimum, a bachelor's or advanced degree, from an accredited university, with a major in biology, zoology, wildlife biology, natural resources science, or a closely related scientific discipline, at least two years of field experience in the biology and natural history of local plant, fish, and wildlife resources present at the cannabis cultivation site, and knowledge of state and federal laws regarding the protection of sensitive and endangered species.

- If evidence of bat use is found and species-specific identification is required, then nighttime acoustic surveys shall be conducted to determine which species are utilizing the roost. The survey shall determine if the roost is a maternity roost (assumed if roost is found during the bat maternity season which is typically May 1 through August 31), hibernacula, or day roost. If a maternity roost is present, delay of the construction shall be necessary until after the roost is vacated or a disturbance exclusion buffer of at least 50 feet shall be established around the maternity roost, or as determined by a qualified biologist in coordination with CDFW. If non-maternity bat roosts are detected/observed within trees to be removed as a result of project construction, impact avoidance measures shall be undertaken to ensure bats have exited the roost prior to tree removal activities in consultation with CDFW. Measures to exclude bats from occupied roosts may include but are not limited to: disturbance to roosting individuals through introduction of light and/or noise to create an undesirable setting and to encourage the bats to vacate the roost. Access points shall be sealed to prevent re-entry of bat species. Project construction may commence upon final approval by CDFW and the County.

Mitigation Measure BIO-3: Special-Status Amphibians and Reptiles

- Within 3-5 days prior to initiating work at the project site (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, demolition, and grading), a qualified biologist (as defined under Mitigation Measure BIO-2) shall perform a pre-construction survey for CRLF and WPT individuals within the boundaries of the project site plus a 500-foot buffer around the construction area.
- If CRLF are found during the pre-construction survey, the qualified biologist shall immediately inform the construction manager that work not be initiated until the CRLF has dispersed from the work area. The qualified biologist shall then consult with CDFW immediately and provide a short description of observations, including a count of individuals and the life stage(s), condition at the site, and other aquatic species observed (if applicable). Unless explicitly authorized by the CDFW (e.g., through issuance of an Incidental Take Permit (ITP) or other means), CRLF shall not be relocated if encountered in the project site. If they do not disperse on their own volition, the qualified biologist shall monitor the frog and consult with CDFW to determine the appropriate course of action, which may include obtaining an ITP.
- In the event that WPT are found in the project site during preconstruction surveys, it shall be left alone to move out of the area on its own. If it does not move on its own, the qualified biologist shall notify CDFW and relocate the individuals(s) to the nearby unnamed creek (Deer Creek as listed by the hydrological report) at least 250 feet away from the project location. Relocation areas shall be of suitable habitat, on shallow banks with slow moving water and shall be far enough away so as not to be affected by project activities.
- If possible, conduct activities during a limited operating period between May 1 and October 15.
- Construction activities shall not be conducted during or within 48 hours after a rain even between October 16 to April 31. If work occurs within 48 hours of a rain event between October 16 and April 31, a preconstruction survey for CRLF and WPT shall be conducted as described above.
- Prior to utilizing vehicles and equipment, the applicant shall visually check the area underneath for frogs and turtles between October 16 to April 31.

Mitigation Monitoring:

Mitigation Monitoring BIO-1, BIO-2, and BIO-3: Prior to the initiation of construction activities, the applicant shall retain a qualified biologist to conduct preconstruction wildlife surveys within and surrounding the cultivation area. If sensitive species are identified, the applicant and qualified biologist shall consult with CDFW to designate a no-disturbance buffer to protect identified habitat for special-status species. A copy of the preconstruction survey report shall be submitted to the County. Prior to issuance of a grading permit, the applicant must submit evidence to the County that Mitigation Measures BIO-1, BIO-2, and BIO-3 have been completed.

- 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?**

Regulatory Framework

California Fish and Game Code Section 1600-1603

Streams, lakes, and riparian vegetation, as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the CFGC. Any activity that would do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations ("CCR") as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life". This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFW 1994). Riparian vegetation is defined as, "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFW 1994). In addition to impacts to jurisdictional streambeds, removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

Sensitive Natural Communities

Sensitive natural communities are vegetation communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW (i.e., CNDDDB) or the USFWS. The CNDDDB identifies a number of natural communities as rare, which are given the highest inventory priority. Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA California Code of Regulations (CCR): Title 14, Div. 6, Chap. 3, Appendix G.

California Oak Woodland Statute

In September 2004, State Bill 1334 was passed and added to the State Public Resources Code as Statute 21083.4, requiring Counties to determine in their CEQA documents whether a project in its jurisdiction may result in a conversion of oak woodlands that would have a significant effect on the environment. In addition, if the County determines that a project may result in a significant impact to oak woodlands, the County shall require one or more of the following mitigation alternatives to mitigate for the impact:

- 1) Conserving oak woodlands through the use of conservation easements.
- 2) Plant an appropriate number of trees, including maintaining the plantings and replacing dead or diseased trees; required maintenance of trees terminates seven years after the trees are planted; this type of mitigation shall not fulfill more than half of the mitigation requirement for the project; this type of mitigation may also be used to restore former oak woodlands.
- 3) Contribute funds to the Oak Woodlands Conservation Fund.
- 4) Other mitigation measures developed by the County.

The CFGC (Section 1361) defines oak woodland habitat as "an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover."

Comment:

The project would primarily take place in an existing barn structure. Other project activities would include the addition of a 100 sq.-ft ADA-compliant bathroom, which would be constructed on top of an existing gravel pad and would not involve the removal of any trees or any impacts to sensitive natural communities. Therefore, project implementation would not result in adverse impacts to sensitive natural communities.

Significance Level: No 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?**

Regulatory FrameworkFederal***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 USACE administration of the Section 404 program and may override a USACE decision with respect to permitting. 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 (State Water 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.

National Pollutant Discharge Elimination System (NPDES)

The NPDES program requires permitting for activities that discharge pollutants into waters of the United States. This includes discharges from municipal, industrial, and construction sources. These are considered point-sources from a regulatory standpoint. Generally, these permits are issued and monitored under the oversight of the State Water Resources Control Board (SWRCB) and administered by each regional water quality control board. Construction activities that disturb one acre or more (whether a single project or part of a larger development) are required to obtain coverage under the state's General Permit for Dischargers of Storm Water Associated with Construction Activity. All dischargers are required to obtain coverage under the Construction General Permit. The activities covered under the Construction General Permit include clearing, grading, and other disturbances. The permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) with a monitoring program. The project does not require coverage under the Construction General Permit because the project is not engaging in construction activities that would "disturb one acre or more."

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Act (Porter-Cologne Act) (California Water Code § 13260) requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the "Waters of the State" to file a report of discharge with the RWQCB through an application for waste discharge. Waters of the State are defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. If a 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.

State Water Resources Control Board Cannabis Cultivation Policy

The purpose of the Cannabis Cultivation Policy (Policy) is to ensure that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, and springs. The Policy establishes principles and guidelines for cannabis cultivation activities to protect water quality and instream flows. Cannabis cultivation legislation enacted California Water Code (Water Code) section 13149, which directs the State Water Board, in consultation with the CDFW, to adopt interim and long-term principles and guidelines for the diversion and use of water for cannabis cultivation in areas where cannabis cultivation may have the potential to substantially affect instream flows. The legislation requires the State Water Board to establish these principles and guidelines as part of a state policy for water quality control.¹⁴ Additionally, Business and Professions Code section 26060.1(b) requires that these principles and guidelines be included

¹⁴ Water Code section 13149(b)(2). The board shall adopt principles and guidelines under this section as part of state policy for water quality control adopted pursuant to Article 3 (commencing with Section 13140) of Chapter 3 of Division 7. Water Code section 13142 outlines specific requirements for a state policy for water quality control, which this Policy implements.

as conditions in cannabis cultivation licenses issued by the California Department of Food and Agriculture (CDFA). The State Water Board has primary enforcement responsibility for the principles and guidelines and shall notify CDFA of any enforcement action taken.¹⁵

Comment:

The project site was surveyed to determine if any wetlands and waters or jurisdictional features subject to U.S. Army Corps of Engineers, Regional Water Quality Control Board, or CDFW jurisdiction were present on site. This assessment was based on the presence of wetland indicators including hydric vegetation, soil and hydrology indicators. No wetland indicators were observed within the proposed project area. An unnamed intermittent drainage (Deer Creek as listed by the hydrogeological report) that is tributary to San Pablo Bay occurs approximately 180 feet north of the project site. All proposed project activities would occur outside of the intermittent drainage. This drainage is likely to be regulated as a jurisdictional water of the U.S. under the Clean Water Act. A non-jurisdictional man-made drainage ditch runs south and west of the barn. The ditch was excavated when the barn was built to help with drainage issues associated with the construction of the barn. The ditch is approximately one foot wide, does not have a defined bed, bank, or channel, and contains upland vegetation. There was no evidence of recent scour, and no emergent vegetation during site visits conducted in May 2018 by Ms. Ishimatsu or in April 2019 by MIG.

The proposed project would not substantially increase the rate or amount of surface runoff, nor would it create any additional impervious surface which could result in flooding on- or off-site. The ADA bathroom would be constructed on top of an existing gravel pad which is considered impervious surface. All nursery operations would occur indoors, including nutrient storage for the medium. Runoff from irrigation would be contained in the structure. The project would be required to comply with standard County construction grading and drainage practices, as described in County Code Chapter 11, which would minimize potential impacts. Therefore, potential impacts to the unnamed intermittent stream (Deer Creek as listed by the hydrogeological report) would be less-than-significant.

Significance Level: Less than Significant Impact

- 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:

Wildlife corridors are linear and/or regional habitats that provide connectivity between or to other naturally vegetated open spaces. Wildlife corridors can consist of a sequence of stepping-stones across the landscape (i.e., discontinuous areas of habitat such as isolated wetlands) or continuous lineal strips of vegetation and habitat (e.g., riparian strips, ridge lines), or they may be parts of larger habitat areas selected for their known or likely importance to local wildlife. Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and animal species. The regional movement and migration of wildlife species has been substantially altered due to habitat fragmentation over the past century. This fragmentation is most commonly caused by development of open areas, which can result in large patches of land becoming inaccessible and forming a virtual barrier between undeveloped areas. Roads associated with development, although narrow, may result in barriers to smaller or less mobile wildlife species. Habitat fragmentation results in isolated islands of habitat, which affects wildlife behavior, foraging activity, reproductive patterns, immigration and emigration or dispersal capabilities, and survivability.

The general vicinity of the project site is largely undeveloped and rural, and the border of densely

¹⁵ Water Code section 13149(b)(5).

populated Petaluma is approximately 0.75 mile north of the project site. The project site may provide corridor habitat for localized movement of common wildlife species. However, the proposed project would primarily take place in an existing barn structure and the 100-square foot ADA-compliant bathroom would be constructed on an existing graveled surface that provides little habitat value and is not essential to maintaining the wildlife corridor habitat within the greater project site. Therefore, the project site is not considered a major wildlife movement corridor or habitat linkage, and construction of the ADA-compliant bathroom would not prevent wildlife from passing through the region. Project-related impacts to wildlife corridors or wildlife nursery sites would be considered less than significant.

Significance Level: Less than Significant Impact

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

Regulatory Framework

Sonoma County General Plan

The *Sonoma County General Plan 2020* (Sonoma County 2008) Land Use Element and Open Space & Resource Conservation Element both contain goals, objectives, and policies to protect natural resource lands including, but not limited to, biotic areas, special status species habitat, marshes and wetlands, sensitive natural communities, and habitat connectivity corridors summarized below.

Biotic Habitat Areas

The 2020 General Plan defines the Biotic Habitat Areas designated on Figures OSRC 5a through 5i of the Plan as those whose locations are known and considered important for protection at this time. However, the policies below provide for protection of biotic habitats both within and outside the designated areas. Currently available information on the location and value of native habitats and sensitive resources is incomplete and changes over time as sites are assessed, new occurrences are reported, and additional locations are identified. As more habitat mapping information becomes available in the future, changes in designations would be considered along with possible policy changes. Regular collection and updating of reliable information and refinement of best management practices are necessary to protect the County's biotic resources over the long term. Following are the types of biotic habitat addressed by the policies in this section that are pertinent to the proposed project:

Special-Status Species Habitat

Special-status species are plant and animals which are listed or candidate species under the Federal or State Endangered Species Acts and other species considered rare enough to warrant special consideration. Reported occurrences of special-status species are compiled by the California Natural Diversity Data Base (CNDDB) of the CDFW and are routinely updated as new information becomes available. Detailed surveys are typically necessary to confirm the presence or absence of special-status species.

Marshes and Wetlands

Wetlands are transitional areas between aquatic and terrestrial habitats and include marshes, vernal pools, seeps, springs, and portions of riparian corridors with wetland vegetation. Wetlands are recognized for their high fish and wildlife habitat values, occurrences of unique plant and animal species, and importance in water recharge and filtration. Wetlands meeting certain criteria are subject to regulations of the USACE, USFWS, or CDFW. Wetland areas mapped as part of the National Wetlands Inventory and other sources include the Laguna de Santa Rosa, vernal pools, San Pablo Bay and Petaluma marshes, coastal and tidal marshes, and such freshwater marshes as the Pitkin, Kenwood, Cunningham, and Atascadero Marshes. Detailed delineations are typically necessary to confirm the presence and extent of any jurisdictional wetlands.

Sensitive Natural Communities

CDFW has identified certain natural habitats as sensitive natural communities which are rare and vulnerable to further loss. Sensitive natural communities identified in Sonoma County include coastal salt marsh, brackish water marsh, freshwater marsh, freshwater seeps, native grasslands, several types of forest and woodland (including riparian, valley oak, Oregon white oak, black oak, buckeye, Sargent cypress and pygmy cypress), old growth redwood and Douglas fir forest, mixed serpentine chaparral, and coastal scrub, prairie, bluff, and dunes. Many of these communities support populations of special-status species and are important to native wildlife.

Habitat Connectivity Corridors

Maintaining and improving opportunities for habitat connectivity throughout the County is essential for protecting biodiversity and sustaining native plant and animal populations. Linkages and corridors are needed to allow movement across the landscape and to connect wetlands and other important habitat areas to undeveloped lands and permanent open space. Important linkages and corridors include lands south of Glen Ellen connecting Sonoma Mountain and the Mayacamas Range and lands connecting the Laguna de Santa Rosa to agricultural areas south of Highway 116. It should be noted that riparian corridors also provide habitat connectivity.

Riparian Corridors

Sonoma County General Plan Policies OSRC-8a through 8n protect streamside conservation areas along designated riparian corridors. Areas along streams that naturally support native vegetation and wetlands are referred to as "Riparian Corridors." The abundant vegetation in the streamside environment provides food and water and creates breeding, egg deposition, and nesting areas for insects, fish, amphibians, reptiles, birds and mammals. The diversity of plant and animal species in riparian areas is among the highest of Sonoma County's natural landscapes. The dense vegetation provides protective cover and shade and contributes woody debris to stream channels, providing critically important habitat for salmon, steelhead, freshwater shrimp, and other protected freshwater fisheries and aquatic species.

Riparian vegetation contributes to water quantity and quality in several ways. Vegetation filters sediment and pollutants in storm water runoff, slows flood flows, provides erosion protection for streambanks, and facilitates groundwater recharge. Elimination of natural plant communities along streams can increase surface run-off and siltation, contribute to water temperatures too warm for steelhead, salmon, and other fish, and reduce long term water availability. The protection of riparian areas can create conflicts with agricultural and urban uses. Riparian corridors often contain prime soils for crops, provide water and shade for livestock, and provide a source of irrigation water and locations for agricultural wells. Riparian areas may support agricultural uses. In turn, vegetation removal, mowing, fencing, spraying, disking and other agricultural practices can reduce the habitat supporting functions of nearby riparian areas. In urban areas, streamside areas provide natural open space and opportunities for recreation, education, and aesthetic appreciation, but these areas and their habitat value are often restricted by buildings, yards, landscaping, fencing, and trails.

Specifically, Policy OSRC-8b establishes the following streamside conservation areas along both sides of designated Riparian Corridors as follows, measured from the top of the higher bank on each side of the stream as determined by PRMD:

1. Russian River Riparian Corridor: 200'
2. Flatland Riparian Corridors: 100'
3. Other Riparian Corridors: 50'

Sonoma County Ordinances

Riparian Corridor Combining Zone

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.

Valley Oak Habitat (VOH) Combining District

The VOH combining district is established to protect and enhance valley oaks and valley oak woodlands and to implement the provisions of *Sonoma County General Plan 2020* Resource Conservation Element section 5.1. Design review approval may be required of projects in the VOH, which would include measures to protect and enhance valley oaks on the project site, such as requiring that valley oaks shall comprise a minimum of fifty percent (50%) of the required landscape trees for the development project.

Tree Protection

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 32alifo*), California bay (*Umbellularia 32alifornia*), and their hybrids.

Protection of Watercourses

Construction grading and drainage within, adjacent to, or involving the alteration of watercourses shall comply with the provisions of Article II (Water Clarity) of Chapter 23 of this code, any necessary state and federal permits, approvals, or authorizations, and the following requirements.

- A. Flood carrying capacity. The flood carrying capacity of any altered or relocated portion of a watercourse shall be maintained.
- B. Obstruction of watercourses. Watercourses shall not be obstructed unless an alternate drainage facility complying with Section 11.14.040.B is installed.
- C. Fills within watercourses. Fills placed within watercourses shall have protection against erosion.
- D. Streams in closed conduits. Except for stream crossings, streams shall not be placed in closed conduits. Stream crossings shall be limited to the minimum width necessary to cross the stream.
- E. Heavy equipment. Heavy equipment shall not cross or disturb channels of actively flowing streams unless best management practices referenced or detailed in the department's best management practices for construction grading and drainage are in place.
- F. Materials storage. Materials that could contribute to pollution shall not be deposited or stored in or adjacent to a watercourse. (Ord. No. 6219, § I (Exh. A), 12-19-2017)

Removal of Trees and Other Vegetation

Construction grading and drainage shall not remove or disturb trees and other vegetation except in compliance with the department's best management practices for construction grading and drainage and the approved plans and specifications. Construction grading and drainage shall be conducted in compliance with the following requirements.

- A. The limits of work-related ground disturbance shall be clearly identified and delineated on the approved plans and specifications and defined and marked on the site to prevent damage to surrounding trees and other vegetation.
- B. Trees and other vegetation within the limits of work-related ground disturbance that are to be retained shall be identified and protected from damage by marking, fencing, or other measures. (Ord. No. 6219, § I (Exh. A), 12-19-2017)

Setbacks for Lakes, Ponds, And Reservoirs

Construction grading shall be set back fifty feet (50') from the high-water mark of lakes, ponds, and reservoirs, unless a greater setback is required by the general plan, local coastal plan, or zoning code. The setback requirements in this section shall not apply to construction grading for construction drainage; trails; public projects; resource conservation, restoration, or enhancement projects; or lake, pond, or reservoir maintenance. (Ord. No. 6219 § I (Exh. A), 12-19-2017)

Setbacks for Wetlands

Construction grading shall be set back 100 feet from the delineated boundary from wetlands designated in the zoning code and 50 feet from all other wetlands, unless a greater setback is required by the general plan, local coastal plan, or zoning code. The setback requirements would not apply where all necessary state and federal permits, approvals, or authorizations to fill the wetlands are obtained.

Comment:

With implementation of Mitigation Measures BIO-1 through BIO-3, the project would be consistent with Sonoma County General Plan 2020 Land Use Element and Open Space & Resource Conservation Element goals, policies, and objectives to protect natural resource lands including, but not limited to watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors.

An unnamed intermittent drainage (Deer Creek as listed in the hydrogeological report) is located on the applicant's parcel, approximately 180 feet north of the project site; therefore, the parcel is within the Riparian Corridor (RC) Combining Zone for Sonoma County. However, no impacts to riparian habitat would occur during Project implementation. All proposed Project activities would occur outside of the intermittent drainage. The project would be required to comply with standard County construction grading and drainage practices, as described in County Code Chapter 11, which would minimize potential impacts. The project site is not located within a Valley Oak Habitat (VOH) Combining District, no valley oak trees or other riparian vegetation removal would occur as a result of the project. In addition, Mitigation Measures BIO-1 through BIO-3 are consistent with the County's General Plan policies and ensure special-status wildlife and vegetation, natural vegetation communities, and aquatic resources are protected.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

Implement **Mitigation Measures BIO-1, BIO-2, and BIO-3**

Mitigation Monitoring:

Implement **Mitigation Monitoring BIO-1, BIO-2, and BIO-3**

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

The project site is not located within the plan area of adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state Habitat Conservation Plan.

Significance Level: No Impact

5. CULTURAL RESOURCES:

Evans & De Shazo, Inc., performed a Cultural Resources Study for the Proposed Cannabis Cultivation (Nursery) Project at 205 Deer Creek Lane, Petaluma, Sonoma County on October 11, 2018. In the study, Evans & De Shazo, Inc classified the "study area" as the entire 60.58-acre parcel and the "project area" as an approximate 4-acre portion of the 60.58-acre parcel where the Project is proposed (Existing Barn). The 4-acre "study area" encompasses the entire barn and location of the proposed ADA compliant bathroom.

Would the project:

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

Comment:

On September 24, 2018, Evans & De Shazo, Inc (EDS) conducted a Cultural Resources Study for the proposed Cannabis Cultivation (Nursery) Project located at 205 Deer Creek Lane, City of Petaluma, Sonoma County, California (APN:019-260-007). The study identified no historic buildings or structures (45 years of age or older) located within the 4-acre project area.¹⁶

Significance Level: No Impact

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

Comment:

A Native American Sacred Lands File Search requested through the Native American Heritage Commission (NAHC) on September 14, 2018 indicated that there are no archaeological (prehistoric and historic) resources located within the four-acre project area boundaries. Letters were sent to eight Native American tribes, per NAHC recommendation, including the Dry Creek Rancheria Band of Pomo Indians, Federated Indians of Graton Rancheria (FIGR), Kashia Band of Pomo Indians of the Stewarts Point, Lytton Rancheria of California, Middletown Rancheria, Mishewal-Wappo Tribe of Alexander Valley, and Cloverdale Rancheria of Pomo Indians of California. As of the time of report preparation, no responses were received by EDS. In addition, a cultural resources records search was conducted by EDS at the Northwest Information Center (CHRIS-NWIC) on September 24, 2018, and EDS conducted an archaeological field survey on October 1, 2018. The archival research indicated a prehistoric Native American site (P-49-000419: Culver Site) containing midden soils and lithic debitage located approximately 0.20 miles to the northeast of the 4-acre project area.¹⁷ In addition, the former San Antonio District Schoolhouse, built circa 1867, occupied portions of the proposed project site until the building was demolished in 1954.¹⁸ During the field survey, EDS identified three (3) eucalyptus trees that mark the location of the schoolhouse. No other surface artifacts or cultural resources associated with the schoolhouse were located.

¹⁶ Evans and De Shazo, Inc. 28, March 2019. Results of a Cultural Resources Study for the Proposed Cannabis Cultivation Project at 205 Deer Creek Lane, City of Petaluma, Sonoma County, California. Prepared by Evans and De Shazo, Inc. Sebastopol, California 95472, for Node Labs, Inc. (Chris Leavitt). The Cultural Resources Study is on file at the Northwest Information Center at Sonoma State University and the Sonoma County Permit Resources Department.

¹⁷ Evans and De Shazo, Inc. 28, March 2019.

¹⁸ Evans and De Shazo, Inc. 28, March 2019.

Based on the former location of the San Antonio District Schoolhouse, the known Native American prehistoric site (P-49-000419: Culver Site) approximately 0.20 miles northeast of the project site, the proximity of Deer Creek and associated flora and fauna resources that transverse the northern end of the project site, and the documented ethnographic history of Native Americans within Sonoma County, the parcel has a moderately high to high potential of yielding subsurface archaeological resources.

The County grading ordinance has “standard” archaeological requirements listed in Chapter 11, Sec. 11-14-050 of the County Code for all grading activities which relate to the protection of human remains and archaeological resources. The proposed project would comply with these requirements as standard operating practice. However, because the project is located on a site with a high risk of archaeological resources, the following mitigation measures would be necessary to reduce potentially significant impacts to undiscovered archaeological resources that may be accidentally encountered during project implementation to a less-than-significant level.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure CULT-1: A Tribal or Archaeological Monitor must be present onsite during all grading and ground disturbance work. All building and/or grading permits must have the following note printed on grading or earthwork plan sheets:

NOTE ON MAP:

A Tribal or Archaeological Monitor is required to be present during all grading or other ground-disturbing work. The Tribal Monitor must be present on site before the start of any ground disturbing work, including scraping. In the event that cultural resources are discovered at any time during grading, scraping or excavation within the parcel, all work shall be halted in the vicinity of the find. Artifacts associated with prehistoric sites may include humanly modified stone, shell, bone or other cultural materials such as charcoal, ash and burned rock indicative of food procurement or processing activities. Prehistoric domestic resources include hearths, firepits or house floor depressions, whereas typical mortuary resources are represented by human skeletal remains. The Tribal Monitor, Archaeological Monitor, and Permit Sonoma – Project Review Staff shall be notified. Permit Sonoma Staff should consult with the appropriate tribal representative(s) from the tribes known to Permit Sonoma to have interests in the area to determine if the resources qualify as Tribal Cultural Resources (as defined in Public Resource Code § 21074). If determined to be a Tribal Cultural Resource, applicant must develop and coordinate proper protection/mitigation measures required for the discovery in conjunction with Permit Sonoma and the appropriate tribal representative(s). Permit Sonoma may refer the mitigation/protection plan to designated tribal representatives for review and comment. No work shall commence until a protection/mitigation plan is reviewed and approved by Permit Sonoma Project Review Staff. Mitigations may include avoidance, removal, preservation and/or recordation in accordance with California law. Evaluation and mitigation shall be at the applicant's sole expense.

“If human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and Permit Sonoma Staff and County Coroner must be notified immediately pursuant to State law so that an evaluation can be performed. If the remains are deemed to be Native American, the Native American Heritage Commission must be contacted by the Coroner so that a “Most Likely Descendant” can be designated and the appropriate provisions of the California Government Code and California Public Resources Code would be followed.”

Mitigation Measure CULT-2: Applicant/operator must provide Archaeological Sensitivity Training for construction personnel that is conducted by a qualified professional archaeologist, who meets U.S. Secretary of Interior's Professional Qualifications and Standards and is retained by the applicant at

the applicant expense. Training shall include how to identify archaeological resources that may be encountered during earthmoving activities and procedures to follow in such an event (i.e., implement Sonoma County Code Section 11-14-050.) The training session would include a handout and would focus on how to identify archaeological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, the duties of archaeological monitors, and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation, if one is necessary.

Mitigation Measure CULT-3: Monitor construction excavations for archaeological resources in all strata and to a depth of 10 feet below pre-construction grade. The applicant shall retain a qualified archaeological monitor, who would work under the direction and guidance of a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, cleaning/grubbing) to a depth of 10 feet below pre-construction grade. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the project archaeologist.

Mitigation Monitoring:

Mitigation Monitoring CULT-1: Prior to issuance of building/grading permits, the applicant must include and print the above notes on the building, grading and improvement plans. The applicant shall provide a contact with a qualified consultant to monitor ground disturbing activities to Permit Sonoma and the Tribal Representative.

Mitigation Monitoring CULT-2: Prior to grading activities, the archaeologist shall submit to Permit Sonoma the Archaeological Sensitivity Training program for review. In the event archaeological resources are encountered, and upon completion of disposition of the resources, per County authorization, the archaeologist shall submit a final report to the County, the applicant, the Northwest Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA and treatment of the resources.

Mitigation Monitoring CULT-3: Prepare report upon completion of monitoring services. The archaeological monitor under the direction of a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards, shall prepare a final report at the conclusion of archaeological monitoring. The report shall be submitted to the County, the applicant, the Northwest Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA and treatment of the resources.

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

Comment:

In accordance with CEQA regulations and guidelines, and the Sonoma County Cannabis Land Use Ordinance No. 6189 and the updated Sonoma County Cannabis Land Use Ordinance No. 6245, EDS conducted a CRS to determine if there are any potentially significant cultural resources within the parcel. The CRS included a record search and review, a native American Sacred Lands Inventory, and a field survey that were completed by EDS Senior archaeologist, Gilbert Browning, M.A., RPA

and EDS Principal Archaeologist, Sally Evans, M.A., RPA. The summary of the findings determined that there are no known burial sites in the vicinity of the project area.¹⁹ Although no burial sites are known in the vicinity of the project, the project would require a small amount of ground-disturbing activities (e.g., grading/trenching, excavation and fill) for construction of the new ADA-compliant bathroom, proposed 2,500 gallon water storage tank, proposed fire hydrant and associated water/wastewater hookups., which could uncover undocumented materials. However, Sonoma County Code Section 11-14-050 provides procedures for protection of human remains, including those identified to be Native American.

“Sec. 11.14.050. – Protection of human remains and archaeological resources.

Where human remains or archaeological resources are discovered during construction grading and drainage, all work shall be halted in the vicinity of the find, the director shall be notified, and the following shall occur before work may be resumed:

- A. Human remains. If human remains or suspected human remains are discovered, the permittee shall notify the county coroner and comply with all state law requirements, including Health and Safety Code section 7050.5 and Public Resources Code Section 5097.98, to ensure proper disposition of the human remains or suspected human remains, including those identified to be native America remains.*
- B. Archaeological resources. If archaeological resources are discovered, the director shall notify the State Historic Preservation Officer and the Northwest Information Center at Sonoma State University, and the permittee shall retain a qualified archeologist to evaluate the find to ensure proper disposition of the archaeological resources or suspected archaeological resources. All costs associated with the evaluation and mitigation of the find shall be the responsibility of the permittee. The director shall provide notice of the find to any tribes that have been identified as having cultural ties and affiliation with the geographic area in which the archaeological resources or suspected archeological resources were discovered, if the tribe or tribes have requested notice and provided a contact person and current addresses to which the notice is to be sent. The director may consult with and solicit comments from notified tribes to aid in the evaluation, protection, and proper disposition of the archaeological resources or suspected archaeological resources. The need for confidentiality of information concerning the archaeological resources or suspected archaeological resources shall be recognized by all parties. For the purposes of this section, archaeological resources include historic or prehistoric ruins, burial grounds, pottery, arrowheads, midden, or culturally modified soil deposits. Artifacts associated with prehistoric ruins include humanly modified stone, shell, bone, or other cultural materials such as charcoal, ash, and burned rock indicative of food procurement or processing activities. Prehistoric domestic features include hearths, fire pits, or floor depressions; mortuary features are typically represented by human skeletal remains.*

Implementation of this standard County policy would ensure that this impact would be less than significant.

Significance Level: Less than Significant Impact

6. ENERGY

Would the project:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or**

¹⁹ Evans and De Shazo, Inc. 28, March 2019

unnecessary consumption of energy resources, during project construction or operation?Comment:

Long-term energy demand would result from employees working on the project site and from employee vehicle trips. The proposed cannabis operation would result in energy usage from electricity for lighting, water conveyance, odor reducing fans, the ADA-compliant bathroom, the security system (alarm, lights, cameras), and various small appliances used to make the media such as an autoclave and hotplate. The indoor nursery would utilize 120 LED lights with 13-watt LED lamps and 60-watt LED lamps.

Operation of the proposed project would increase energy usage relative to existing conditions in Sonoma County. However, this increase in energy use would not represent a substantial increase, nor would it be wasteful or inefficient. The barn would consume energy associated with lighting and water pumps. The applicant has indicated that they would purchase 100% renewable power from EverGreen-Sonoma Clean power through PG&E as required by the Cannabis Ordinance.

Significance Level: Less than Significant Impact

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

The proposed project would comply with Sonoma County ordinance 7D2-1, which pertains to energy efficiency, and Title 24, Part 6 of the California Code of Regulations, Building Energy Efficiency Standards.

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 project site is not within a fault hazard zone, as defined by the Alquist-Priolo fault maps.²⁰ The closest known fault is the Rodgers Creek fault, which is located approximately 5 miles to the west of the project site. The project would be limited to grading/trenching for water/wastewater hookups for construction of the 100 square foot bathroom. All work would be subject to inspection by Permit Sonoma and must conform to all applicable code requirements and approved improvement plans prior to the issuance of a certificate of occupancy.

Significance Level: Less than Significant Impact

²⁰ California Department of Conservation, Earthquake Zones of Required Investigation, <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed 5/1/19.

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. The project proposes construction/placement of a 2,500-gallon water storage tank, fire hydrant and 100 square foot bathroom with minor grading activities to connect the bathroom to the existing septic tank. The proposed project would involve use of an existing barn which would be occupied by employees. The design and construction of new structures are subject to engineering standards of the California Building Code (CBC), which consider soil properties, seismic shaking and foundation type. Application of geotechnical evaluation and appropriate engineering practices would reduce risks of potential injury and damage resulting from seismic activity. 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 also conduct construction activities in accordance with the Sonoma County Code Chapter 7 (Building regulations) and Chapter 11 (Construction Grading and Drainage).

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 in ground failure. Areas of Sonoma County most at risk of liquefaction are along San Pablo Bay and in alluvial valleys. The project site is not located within a high liquefaction hazard area according to the Sonoma County General Plan 2020 Public Safety Element.²¹ According to the Sonoma County GIS tool, the parcel is located within a "Moderate Susceptibility, Very Low Susceptibility" liquefaction hazard area.

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 project would be located in a Class IX Landslide Hazard area according to the General Plan Public Safety Element, Figure PS-1d,²² which means the area is highly susceptible to landslides. However, the proposed project does not include any building or grading that could destabilize slopes or result in slope failure. The project site is also not located on a slope.

Significance Level: Less than Significant Impact

²¹ Sonoma County General Plan 2020, Public Safety Element, Figure PS-1c, Liquefaction Hazard Areas, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/General-Plan/Public-Safety-Liquefaction-Hazard-Areas/>, accessed 5/1/19.

²² Sonoma County General Plan 2020, Public Safety Element, Figure PS-1d, Deep-Seated Landslide Hazard Areas, <http://sonomacounty.ca.gov/WorkArea/DownloadAsset.aspx?id=2147542632>, accessed 5/6/19.

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

The project is proposing the construction of a 100 square foot bathroom on top of an existing gravel pad, the addition of a 2,500-gallon water storage tank and the installation of a fire hydrant. There would be minor grading and construction activities as proposed part of the project. Additionally, the project involves cannabis nursery in an existing structure. There would be no changes to the exterior footprint of the structure. As discussed in Section 10, Hydrology and Water Quality, erosion and sediment control provisions of Sonoma County Code Chapter 7 and Chapter 11 require implementation of best management practices to reduce runoff. Required inspection by Permit Sonoma staff would ensure that all grading and erosion control measures are constructed according to the approved plans. Additionally, the amount of potential ground disturbance would not be substantial and would disturb approximately 0.0009% of the total parcel.

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 and other geologic hazards as described in Section 6.a.ii, iii, and iv. However, since the project would not involve major ground disturbance, it would not accentuate risks associated with landslides, lateral spreading, subsidence, liquefaction or collapse.

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:

Table 18-1-B of the Uniform Building Code is an index of the relative expansive characteristics of soil as determined through laboratory testing. The project site contains "Los Osos clay loam" that have moderate potential for shrink-swell, which could result in soil expansion as listed by the UC Davis Soil Mapping Site Soil Web.²³ The proposed project would not involve major construction of structures. The 100-square foot bathroom is proposed to be located on an existing gravel pad. Therefore, there would not be a substantial risk to life, and impacts would be less than significant.

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 site is not in an area served by public sewer. An existing permitted septic system serves the residence on the parcel and would serve any domestic wastewater resulting from the project's four full-time employees. The existing septic system would serve the proposed bathroom. The septic system is described more in the Utilities section.

Significance Level: Less than Significant Impact

²³ UC Davis Soil Mapping Site Soil Web: An Online Soil Survey Browser, <http://casoilresource.lawr.ucdavis.edu/soilweb/> accessed 5/7/19

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

Comment:

Results of the on-line paleontological resources record search through the University of California Museum of Paleontology (UCMP)²⁴ database indicate that there are no known vertebrate fossil localities or unique geological features that have been previously identified within the project site or within a mile radius. Additionally, the UCMP database failed to identify any fossil localities within the same sedimentary deposits at depths that extend into the project area.

The Geological Map of California indicates that the project site consists of surface sediments composed of younger Quaternary alluvial fan deposits that are underlain by Franciscan volcanic and metamorphic rocks called “metavolcanic rocks”, which make up the Franciscan Formation.²⁵ These deposits typically do not contain significant vertebrate fossils at any depth.

Significance Level: Less than Significant Impact

8. GREENHOUSE GAS EMISSIONS:

Gases that trap heat in the atmosphere and affect regulation of the Earth’s temperature are known as greenhouse gases (GHGs). Many chemical compounds found in the earth’s atmosphere exhibit the GHG property. GHG allow sunlight to enter the atmosphere freely. When sunlight strikes the earth’s surface, it is either absorbed or reflected back toward space. Earth that has absorbed sunlight warms up and emits infrared radiation toward space. GHGs absorb this infrared radiation and “trap” the energy in the earth’s atmosphere. Entrapment of too much infrared radiation produces an effect commonly referred to as “global warming”, although the term “global climate change” is preferred because effects are not just limited to higher global temperatures.

GHGs that contribute to climate regulation are a different type of pollutant than criteria or hazardous air pollutants because climate regulation is global in scale, both in terms of causes and effects. The 1997 United Nations’ Kyoto Protocol international treaty set targets for reductions in emissions of four specific GHGs – carbon dioxide, methane, nitrous oxide, and sulfur hexafluoride – and two groups of gases – hydrofluorocarbons and perfluorocarbons. These are the primary GHGs emitted into the atmosphere by human activities.

Global climate change is the result of GHG emissions worldwide; individual projects do not generate enough GHG emissions to influence global climate change. Thus, the analysis of GHG emissions is by nature a cumulative analysis that focuses on whether an individual project’s contribution to global climate change is cumulatively considerable.

Would the project:

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

Comment:

The County does not have an adopted Climate Action Plan but has established GHG reduction goals (via resolution) to establish a consistent framework throughout the County, one of which is “*Sonoma County agrees to work towards the [Regional Climate Protection Authority] RCPA’s countywide ide*

²⁴ UC Museum of Paleontology, <https://ucmp.berkeley.edu/>, [accessed 4/16/19]

²⁵ Olaf P. Jenkins (1963, Second Printing 1967). Geological Map of California: Santa Rosa Sheet. Compilation by James B. Koenig. Electronically Available at: ftp://ftp.conservation.ca.gov/pub/dmg/...Santa_Rosa/GAM_022_Map_1963.pdf

target to reduce green house gas emissions by 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050.” The County concurs with and utilizes as County thresholds Bay Area Air Quality Management District (BAAQMD) recommended greenhouse gas significant thresholds. The County concurs that these thresholds are supported by substantial evidence for the reasons stated by BAAQMD staff. For projects other than stationary sources the greenhouse gas significance threshold is 1,100 metric tons per year of CO₂e or 4.6 metric tons of CO₂e per service population (residents and employees) per year. BAAQMD’s staff analysis is found in the document titled “Revised Draft Options and Justification Report, October, 2009,” which is a publicly available document that can be obtained from the BAAQMD website or from the County.

Indoor nursery operations include the use of energy-intense lighting and ventilation systems which could operate 24 hours per day. In order to address the potential for greenhouse (GHG) emissions associated with this energy demand, the Cannabis Ordinance (Sec. 26-88-254(g)(3) of the County Code) included the following:

“Energy Use. Electrical power for indoor cultivation...but not limited to illumination, heating, cooling, and ventilation, shall be provided by any combination of the following: (i) on-grid power with one hundred percent (100%) renewable source; (ii) on-site zero net energy renewable source; or (iii) purchase of carbon offsets of any portion of power not from renewable sources.”

Energy usage for the project is expected to be minimal. The growing area (barn) for the project would be powered by 100% renewable energy, from EverGreen-Sonoma, which is rated at 57 lbs of CO₂ per megawatt-hour (Mwh). The project would include limited ground disturbance (grading/trenching for water/wastewater hookups), which would occur during construction of the 100 square foot bathroom. GHG emissions would be limited to the small machinery used for the construction of the ADA bathroom and utility trenching, small HEPA fans inside the nursery (barn) to reduce odor, LED lights used for the nursery, and vehicle traffic associated with employees (a peak of 21 ADT). The project would comply with the Cannabis Ordinance, acquiring energy from a renewable source. Given the small scale of the facility and the existing regulatory requirements, the proposed project would not result in significant GHG and the resulting impact is less-than-significant.

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 does not have an adopted Climate Action Plan but, as discussed in Section 8.a, has established GHG reduction goals. The project, by implementing current County codes, would be consistent with local and state plans, policies, or regulations adopted for the purpose of reducing emissions of GHGs.

As discussed in the 2016 ND (pp. 28-29), the County has established the following standard related to GHG emissions that applies to the proposed project:

“Cultivation sites shall be designed to maximize potential for on-site renewable energy use including consideration of geothermal, solar, wind and cogeneration systems. Electrical power for indoor cultivation and mixed light operations including but not limited to illumination, heating, cooling, and ventilation shall be provided by on-grid power with 100% renewable source, on-site zero net energy renewable source, or with purchase of carbon offsets of any portion of power not from renewable sources. The use of generators as a primary source of power shall be prohibited.”

This standard, which the County would adopt as a condition of project approval, would promote additional reductions in project GHG emissions. In addition, Ordinance No. 6189 also includes the

following operating standard related to energy use:

“(g)(3) Electrical power for indoor cultivation and mixed light operations including but not limited to illumination, heating, cooling, and ventilation, shall be provided by any combination of the following: (i) on-grid power with 100% renewable source; (ii) on-site zero net energy renewable source; or (iii) purchase of carbon offsets of any portion of power not from renewable sources. The use of generators for indoor and mixed light cultivation is prohibited, except for portable temporary use in emergencies only.”

To meet this standard, the project proposes to obtain its power from EverGreen-Sonoma Clean Power, which obtains power from renewable sources. The project is not proposing any portable generators. Therefore, the project 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:

The proposed project involves minor construction (construction of an ADA-compliant bathroom) as well as ongoing maintenance, and therefore could involve the intermittent transport, use and disposal of potentially hazardous materials, including fuels and lubricants, paints, solvents, and other materials commonly used in construction and maintenance. During construction activities, any on-site hazardous materials that may be used, stored, or transported would be required to follow standard protocols (as determined by the U.S. EPA, California Department of Health and Safety, and Sonoma County) for maintaining health and safety.

Potential hazardous substances associated with project operations (nursery) would include nutrient rich wastewater from laboratory activities, containing liquefied agar, nutrient salts, table sugar, and plant growth regulator. This wastewater would be stored in one, 250-gallon waste tank prior to removal by an agricultural waste hauler, who would transport it to a wastewater treatment facility operated by Clean Management Environmental Group. The wastewater would be subject to applicable local (Public Safety Element of the Sonoma County General Plan 2020), state (Title 22, California Code of Regulations), and federal regulations (Resource Conservation and Recovery Act).

These future uses would be unlikely to involve routing transport, use, or disposal of hazardous materials, or result in hazardous emissions. The project would not use pesticides, herbicides or fungicides for the nursery operation (tissue culture and micropropagation). However, the applicant has applied for a CA EPA (DTSC) ID number as a Conditionally Exempt Small Quantity Hazardous Waste Generator (CESQHWG) and would manage Hazardous Waste disposal through the Zero Waste Sonoma business hazardous waste collection program, which schedules regular collection events.

In addition, as standard County procedure, project construction contracts would be required to comply with Sonoma County Fire Code regulations for storage of flammable liquids and with Sonoma County Code regulations related to hazardous materials management (protection of surface waters pursuant to Caltrans Standard Specifications, or functional equivalent). Project construction contracts would also be required to specify procedures in the event of a spill of hazardous materials (i.e., Contractor

responsible for immediately calling emergency number 9-1-1 to report spill, taking appropriate actions to contain spill to prevent further migration of hazardous materials, contacting County to verify appropriate clean-up procedures). With existing General Plan policies and federal, State and local regulation and oversight of hazardous materials, the potential threat to public health and safety or the environment from hazardous materials transport, use or disposal would represent a less-than-significant impact.

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:

See section 9.a. The proposed project would not include major construction-related hazardous materials. Project operations would not use pesticides, herbicides or fungicides nor transport low-grade pesticides and fertilizers. The project site currently has an existing propane tank used for heating the residence. The tank is located on the southwest corner of the barn.

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 nearest school is Arts in the Garden Preschool located at 151 Purrington Road, Petaluma, which is located approximately 4,000 feet northwest of the project site, and therefore there would be no impact.

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:

There are no known hazardous material sites within or adjacent to the project limits, based on review of the following databases on April 25, 2019.

1. The State Water Resources Control Board GeoTracker database,²⁶
2. The Department of Toxic Substances Control EnviroStor database (formerly known as Calsites),²⁷ and
3. The California Integrated Waste Management Board Solid Waste Information System (SWIS).²⁸

²⁶ State Water Resources Control Board Geotracker Database, <http://geotracker.waterboards.ca.gov/>, accessed on 4/25/19.

²⁷ The Department of Toxic Substances Control EnviroStor Database, <http://www.envirostor.dtsc.ca.gov/public/>, accessed on 4/25/19.

²⁸ The California Integrated Waste Management Board of Solid Waste Information System (SWIS), <https://www2.calrecycle.ca.gov/SWFacilities/Directory/>, accessed on 4/25/19.

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. The site is also not within the Petaluma Municipal Airport Referral Area.²⁹

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. Given the minimal traffic associated with the project (estimated 4 full time employees with a peak trip generation of 21 Average Daily Trips (ADT)), the project would not result in a significant change in existing circulation patterns nor would it have a significant effect on emergency response routes.

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 Wildland Fire Hazard Areas mapping (Figure PS-1g) of the Sonoma County General Plan 2020,³⁰ the project is located in a moderate fire hazard zone. The project is located in an area where residences are intermixed with wildlands, characterized by open grasslands and sparse wooded areas that are part of rural residential ranch properties.

The project is located on a relatively flat part of the parcel, which has varying slopes of less than 15%. The immediate surrounding vegetation is very low grasses. The existing well which is located approximately 840 feet from the southern tip of the parcel would serve as an emergency water resource in the event of a fire on this parcel. The applicant proposes installation of a 2,500-gallon water tank and fire hydrant dedicated for fire suppression; the tank and fire hydrant would be located near the driveway.

After Fire Department review (November 17, 2018), conditions of approval were identified related to the following:

- Operation and construction permit
- Emergency planning and response
- Access
- Water Supply

²⁹ County of Sonoma, Petaluma Municipal Airport Referral Area, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/Comprehensive-Airport-Land-Use/Petaluma-Airport/>, accessed on 10/8/19

³⁰ Sonoma County General Plan 2020, Public Safety Element, Wildland Fire Hazard Areas, Figure PS-1g, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/General-Plan/Public-Safety-Wildland-Fire-Hazard-Areas/>, accessed 4/25/19.

- Vegetation Management

As a standard project condition of approval, construction on the project site must conform to the Fire Safe Standards within the Sonoma County Fire Safety Ordinance No. 6184 (Sonoma County Code Chapter 13), including but not limited to fire sprinklers, emergency vehicle access, and water supply making the impact from risk of wildfire less than significant.³¹

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 site is located in the Burdell Mountain-Frontal San Pablo Bay Estuaries watershed. The project site is located outside of the Petaluma Valley Groundwater Basin, a State-defined Priority Groundwater Management Basin. There is one blue line stream on the parcel, Deer Creek. Deer Creek intersects the parcel along its southwest boundary and flows northeasterly across the parcel until exiting the parcel along its northern boundary. The project would result in construction of an ADA bathroom measuring at 100 square feet, installation of a 2,500-gallon water storage tank and a fire hydrant for fire suppression. The bathroom would be constructed on an existing gravel pad.

The project site is not located near any waterways listed by the State Water Resources Control Board Impaired Bodies of Water 2014 and 2016 Integrated Report Mapping tool (SWRCB) or the San Francisco Regional Water Quality Control Board under the Clean Water Act as impaired for sediment nutrients, pathogens and temperature.³² Although Deer Creek is not a listed on the State's 303(d) list,³³ drainage at the site moves from the highlands to Deer Creek, which is the primary drainage generally aligned with Deer Creek Lane, heading east to the Petaluma River wetlands, which is on the State's 303(d) list. The Petaluma River wetland then drains into the north end of San Pablo Bay.

Although indoor commercial cultivation activities, including nurseries, are conditionally exempt under the State Water Resources Control Board (SWRCB) cannabis cultivation program, the project would be required to enroll for coverage under the Cannabis Cultivation General Order or, if applicable, could apply for a waiver of waste discharge requirements.³⁴ County conditions of approval require a copy of the Waste Discharge Permit to be submitted prior to issuance of a Certificate of Occupancy or project operation and vesting the Use Permit.

In addition, Ordinance No. 6245 included the following standard: "*A waste water management plan*

³¹ Sonoma County Fire Safety Ordinance No. 6184, <https://sonomacounty.ca.gov/WorkArea/DownloadAsset.aspx?id=2147495215>, accessed 4/25/19.

³² State Water Resources Control Board, Final 2014/2016 California Integrated Report (Clean Water Act Section 303(d) List/ 305(b) Report) https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtm, accessed 11/22/19

³³ State Water Resources Control Board, 2014 and 2016 Integrated Report – 303(D) listed waters, https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml [accessed 10/3/19]

³⁴ State Water Resources Control Board, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities, Order WQ 2019-0001-DWQ.

shall be submitted identifying the amount of waste water, excess irrigation and domestic wastewater anticipated and proper management and disposal. All cultivation operations shall comply with the Best Management Practices issued by the Agricultural Commissioner and shall submit verification of compliance with the Waste Discharge Requirements of the applicable Regional Water Quality Control Board, or waiver thereof. Excess irrigation water or effluent from cultivation activities shall be directed to a sewer, septic, irrigation or bio-retention treatment systems. If discharging to a septic system an evaluation by a qualified sanitary engineer demonstrating the system's capacity to handle the waste is required. All domestic waste for employees shall be disposed of in a permanent sanitary sewer or on-site septic system demonstrated to have adequate capacity."

Cannabis cultivation best management practices prescribed by the County Agriculture Commissioner include measures related to pesticide and fertilizer storage, pesticide use, fertilizer use, riparian protection, water use and storage, waste management erosion control/grading and drainage and items related to indoor cultivation, including nursery operations.

The project site is located in an area subject to the San Francisco Bay Regional Water Quality Control Board. The project would not create impervious surface or require vegetation removal. Minimal wastewater, minimal irrigation, or domestic waste water is anticipated from this operation. Irrigation run-off would be prevented from entering storm drains or wildlife protected areas and streams because the entire project is inside an existing structure and the wastewater which results from the liquified nutrients that come from the liquefied agar, nutrient salts, table sugar and plant growth regulator would be placed in a 250-gallon waste tank. Employees would use a flush toilet that would connect to the existing septic.

As conditions of approval by the Permit Sonoma, Project Review Section Health, the project would be required to submit documentation of a complete application with no initial objections or concerns by the Regional Quality Board to Permit Sonoma prior to issuance of a Use Permit certificate. The applicant must also apply with the State Water Resource Control Board and if necessary, the San Francisco Regional Water Quality Control Board, for wastewater discharge permits and provide those permits to the Project Review Health Specialist prior to issuance of a Use Permit.

With these project conditions, the project would not violate any water quality standards.

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:

According to EcoAtlas³⁵, the project site is located within the San Pablo Bay Hydraulic Region Cataloging Unit (HUC-8), the Petaluma River-Frontal San Pablo Bay Estuaries Watershed Region (HUC-10), and the 180500020606 sub-watershed (HUC-12), the "Burdell Mountain-Frontal San Pablo Bay Estuaries Watershed." The Groundwater Sustainability Agencies are currently developing Groundwater Sustainability Plans that must be completed by 2022 and would provide a regulatory framework for managing groundwater use. The project is not located in a Priority Groundwater Basin, as indicated by the Sonoma County GIS Tool. However, for projects located in Groundwater Availability Class 4 (Areas with low or highly variable water yield), the County requires preparation of a groundwater study to assess impact of projects that include new groundwater use.

Pursuant to Sonoma County General Plan Policy WR-2e and County Policy 8-1-14, the applicant

³⁵ www.ecoatlas.org, EcoAtlas has been developed through funding from the US Environmental Protection Agency and the California State Water Resources Control Board, accessed 4/29/19

submitted a hydrogeologic assessment prepared by Hurvitz Environmental Services (HES) for Permit Sonoma review and approval. The hydrogeologic assessment evaluated surface water availability, surface water rights and potential impacts to groundwater or nearby surface waters associated with groundwater use for the proposed project. The report also identified the cumulative amount of development and uses allowed in the area to assess the impact of proposed project groundwater use on overdraft conditions, land subsidence, saltwater intrusion, surface water resources, and neighboring wells.

The primary water source for the project is an existing well, "WELL-937237," which is located approximately 840 feet east of the southern tip of the parcel. Hurvitz Environmental indicate that four lots along Deer Creek Lane, including the site, use this well for domestic water. A pumping test on WELL-937237 was performed in 2010 and measured a yield of approximately 10 gallons per minute (GPM).

HES estimated that the groundwater use for the project would be approximately 0.09 acre-feet per year (AF/yr), or approximately 30,000 gallons of water per year. Employee use was estimated based on a maximum of seven employees at 15 gallons per day per employee, which would total approximately 0.12 acre-feet per year, or approximately 38,325 gallons of water per year. Total annual project water use would equal 0.21 acre-feet per year, or 68,325 gallons per year.

In accordance with County requirements, HES also prepared a cumulative impacts analysis for the proposed project, defining the cumulative impact area (CIA) as all properties surrounding and contiguous to the project site, encompassing approximately 600 acres, and including a total of 17 properties (as well as the proposed project). Of these 17 properties, 11 are developed with residences or single-family homes, totaling 21 residences. Land use acreage within the 600-acre cumulative impact area was estimated as follows:

- 125 acres - drainage and wooded land,
- 84 acres - residential use, including houses and landscaping,
- 100 acres - current pasture livestock land, and
- 291 acres - future potential livestock land

Based on USGS data for average domestic water use per person within the Santa Rosa Plain Watershed (0.19 acre-feet per year) and an average Sonoma County household size of 2.55 residents (according to 2010 U.S. Census Bureau data),³⁶ HES determined domestic water use within the entire CIA to be 9.69 acre-feet per year. To calculate future domestic demand, HES assumed that all 17 properties would be developed with a second dwelling (as allowed by current zoning), also with three residents each. Total estimated future domestic water would be 19.38 acre-feet per year. Current pasture land livestock water use was estimated based on 100 current areas of pasture with two cows per acre, using approximately 30 gallons of water per cow per day for a year, for a total current pasture livestock water use of 6.72 acre-feet per year. Future pasture land livestock water use was estimated assuming an additional 291 acres developed with livestock or dairy uses, for a total future pasture livestock water use of 26.28 acre-feet per year. Total future potential groundwater demand in the cumulative impact area (including domestic and livestock uses) would be 45.66 acre-feet per year.

Precipitation, primarily as rainfall, is the major source of inflow to the Petaluma Valley Watershed where the proposed project is located. The Sonoma County Water Agency estimates that annual rainfall at 205 Deer Creek Lane is approximately 26 inches per year (or 2.2 feet per year). Using this precipitation figure over the cumulative impact area, precipitation in the cumulative impact area was calculated at approximately 1,320 acre-feet per year (2.2 feet per year times 600 acres). Based on aquifer thickness estimated from well logs, HES calculated the aquifer storage capacity at 8,790 acre-

³⁶ <http://www.bayareacensus.ca.gov/counties/SonomaCounty.htm>, accessed 4/29/19.

feet. HES conservatively estimated annual aquifer recharge at 132 acre-feet (approximately 10 percent of the estimated annual precipitation). Future annual cumulative impact area water demand would be approximately one-half percent (0.5 percent) of aquifer storage capacity (45.66 acre-feet divided by 8,790 acre-feet). The estimated project groundwater use (0.21 acre-feet per year) would represent approximately 0.16 percent of water available for aquifer recharge (0.21-acre feet divided by 132-acre feet). Based on these calculations, HES determined that the proposed project contribution to overall cumulative water demand would not be significant, and the aquifer could adequately supply 100 percent of the water needed for the project.³⁷

The Hurvitz Report also evaluated the potential impacts to nearby wells. The report indicated that the estimated drawdown was negligible at the nearest identified neighboring well, reported to be 1,650 feet from the project well. The nearest surface water feature is Deer Creek, approximately 850 feet northwest from the project well. Given the distance, no impacts to stream flow were anticipated. The Natural Resources Geologist from Permit Sonoma³⁸ indicated that the findings of the analysis were well documented and of appropriate detail and effort.

As conditions of project approval, the County would require:

1. Prior to Use, the well shall be fitted with groundwater monitoring equipment,
2. Groundwater levels shall be reported to PRMD in January of every year,
3. For a three- year average, well water use for the project shall not exceed 0.25-acre feet per year by more than 10%, project groundwater use would be subject to additional County review.

Therefore, with these project conditions, the proposed project would not result in a net deficit in aquifer volume or a lowering of the local groundwater table.

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 would:

i. result in substantial erosion or siltation on- or off-site;

Comment:

Deer Creek intersects the site along its southwest boundary. Drainage on the site follows Deer Creek which flows northeasterly across the site exiting the site along its northern boundary. The proposed project will involve minor construction for a 2,500-gallon water storage tank, fire hydrant for fire suppression and a 100-square foot ADA bathroom. The bathroom would be placed adjacent to the existing barn. The water storage tank and fire hydrant will be placed directly south of the barn on regularly-mowed grassland. The barn is situated, and the restroom would be placed, on an existing elevated gravel building pad that is approximately 36-inches above native soil. The construction of a septic pipe to connect the proposed bathroom to the existing septic system would be placed 18 inches into the gravel pad. Construction activities associated with the proposed project are not anticipated to alter the existing drainage pattern of the site or area in a way that would result in downstream erosion and/or sedimentation. Conditions of approval require stormwater management to avoid impacts on-site drainage conditions.

³⁷ "Hydrogeologic Assessment Report and Water Supply Plan, 205 Deer Creek Lane," Hurvitz Environmental Services Inc., prepared May 15, 2018.

³⁸ NR Geologist Response and Draft Conditions, Robert Pennington, Received by Everett Louie, 21 November, 2018

Significance Level: Less than Significant Impact

- ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**

Comment:

The proposed project would not substantially increase the rate or amount of surface runoff which could result in flooding on or off-site. The ADA bathroom would be required to comply with stormwater management requirements to avoid impacts to on-site drainage conditions through conditions of approval

Significance Level: Less than Significant Impact.

- 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**

Comment:

All nursery operations would occur indoors, including nutrient storage for the medium and irrigation of plantlets, and would be disposed of through a 250-gallon waste tank which would be disposed of off-site. The project would not result in substantial additional sources of runoff.

Significance Level: Less than Significant Impact

- iv. impede or redirect flood flows?**

Comment:

The project parcel is approximately 175 – 505 feet above sea level. According to Figure PS-1e of the General Plan,³⁹ the project site is outside of the 100-year Flood Hazard Area. According to FEMA, the site is located in ZONE X – Area of Minimal Flood Hazard.⁴⁰ Because the project site is outside the 100-year Flood Hazard Area and is in an Area of Minimal Flood Hazard, there would be no impact.

Significance Level: No Impact

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

Comment:

The project site is not located in a tsunami or seiche zone and therefore is not subject to seiche or tsunami. Seiche is a wave in a lake triggered by an earthquake.

Significance Level: No Impact

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

Comment:

The County would require any future construction to be designed and conducted so as to prevent or

³⁹ Public Safety: Flood Hazard Areas, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/General-Plan/Public-Safety-Flood-Hazard-Areas/>, [accessed 10/4/19]

⁴⁰ FEMA, Flood Zones, <https://msc.fema.gov/portal/home> [Accessed 10/4/19]

minimize the discharge of pollutants or waste from the project site. Best Management Practices to be used to accomplish this goal could include measures such as silt fencing, straw wattles, and soils discharge controls at construction site entrance(s). Storm water Best Management Practices may also include primary and secondary containment for petroleum products, paints, lime and other hazardous materials of concern. The project would include operations within an existing structure and a new bathroom facility on an existing graveled elevated pad. As a result, the proposed project would not conflict with a water quality control plan.

Refer to response to 10.b above regarding potential obstruction of a sustainable groundwater management plan.

Significance Level: Less than Significant Impact

11. LAND USE AND PLANNING:

Would the project:

a) Physically divide an established community?

Comment:

The project would not physically divide a community. The project site is surrounded by rural residential and residential ranch lands, and open agricultural and open forested lands. It does not involve construction of a major physical structure such as a transportation facility or removal of a primary access route such as a road or bridge, nor would project operations impair mobility within an established community or between a community and outlying areas.

Significance Level: Less than Significant 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 would not conflict with any applicable land use plan adopted for the purpose of avoiding or mitigating environmental effect, including the Sonoma County General Plan and Zoning Ordinance. The project site is not within a designated Biotic Resource area or Valley Oak Habitat area; however, the project site is located in a Riparian Corridor Combining District and in a Scenic Resource Combining District (Community Separator) and would be subject to those regulations, as noted below.

The proposed project would also be consistent with the goals, policies, and objectives in the Sonoma County General Plan 2020, including:

- Protection of Water Resources (General Plan Goal LU-8, Objective LU-8.1, Goal, Policy LU-8a): The project would be consistent with regulations pertaining to protecting Sonoma County's water resources and would also be largely consistent with regulations designed to avoid long term declines in available groundwater resources or water quality.
- Preservation of biotic and scenic resources (General Plan Goal LU-10, Objective LU-10.1, Goal OSRC-2, Objective OSRC-2.1, Objective OSRC-2.2, Objective OSRC-2.3, Policy OSC-2d, Goal OSCR-3, Policy OSRC-3a, Policy OSRC-3b, Policy OSRC-3c, Goal OSRC-6, Objective OSRC-6.1, and Policy OSRC-6a): The project would be consistent with regulations pertaining to avoiding biotic resources and would also be consistent with regulations designed to maintain the scenic qualities of the area. (See section 1, Aesthetics, for further

discussion.) With respect to Policy OSRC-2d and Policy OSRC-3c, the Petaluma Dairy Belt Area plan includes standards for the area that are similar to these General Plan policies.

- Night time lights and preservation of night time skies and visual character (General Plan Goal OSRC-4, Objective OSRC-4.1, Objective OSRC-4.2, Policy OSRC-4a, Policy OSRC-4b, and Policy OSRC-4c): The project would use a minimum of exterior lights and would comply with County requirements pertaining to placement, shielding and light levels during the time between sunset and sunrise.
- Renewable energy (General Plan Policy LU-11b, Goal OSRC-14, and Objective OSRC-14.2): The project would purchase 100% renewable power from EverGreen-Sonoma Clean power which is consistent with County goals of increasing energy conservation and improving efficiency.
- Wastewater (General Plan Policy LU0-8a): The project would comply with regional waste discharge requirements and County regulations to minimize storm water, surface water and groundwater pollution.

The project would be consistent with the following Petaluma Dairy Belt Area Plan goals and policies related to resource conservation (in particular, *"It shall be the goal of this Area Plan to accommodate population and land use changes by promoting a planning process that maintains and enhances the quality of life of its citizens."*)⁴¹:

Specifically, the Petaluma Dairy Belt Area Plan reflects these goals and policies:

- 1) *Utilize a community centered concept;*
- 2) *Promote compact urban growth;*
- 3) *Maintain district community identities by ensuring separation between communities;*
- 4) *Accommodate a diversity of urban and rural lifestyle opportunities;*
- 5) *Preserve and protect agricultural lands and encourage agriculture;*
- 6) *Utilize environmental-suitability criteria to located rural growth and guide urban growth;*
- 7) *Accommodate growth in a rationally phased manner in accordance with the ability of public agencies in the County to provide public services;*
- 8) *Plan with respect to countywide and planning area growth targets;*
- 9) *Plan with respect to the reasonable expectation of area residents and the economic significance to the agricultural industry.*

The Petaluma Dairy Belt Area Plan Scenic Resources (pp. 19-20) provides standards to be considered in the design of projects:

- 1) *"Protect the visual quality of unique scenic resources;*
- 2) *Protect and maintain scenic areas essential for defining community;*
- 3) *Protect visually vulnerable landscapes, such as ridgelines;*
- 4) *Maintain scenic resources as an attraction for tourism and recreation;*
- 5) *Review new developments to minimize their impact or scenic quality.*

As discussed in section 10 (Hydrology and Water Quality), the project would be consistent with the Petaluma Dairy Belt Area Plan Water Quality Protection policy listed on Page 16, Goal F, Water-Quality Protection.

The project is located in a Scenic Resources Combining District, classified as a community separator. Development in these areas are subject to applicable General Plan Policies. The project complies

⁴¹ Petaluma Dairy Belt Area Plan, p.11.

with the Scenic Resources Combining District Development Criteria because, 1) the proposed project would not be developed on a skyline, 2) no structures used for cannabis cultivation would be visible from any public right of way, 3) the project does not propose development within a visual or scenic corridor, or unique biotic resource area.

The project would comply with County Code Section 26.88.254 (Cannabis Cultivation-Commercial), which specifies that structures associated with cultivation must meet the applicable zoning district's setbacks, cannot be in the front yard setback, must be screened from public view, and, within agricultural and resource zones, must be setback a minimum of six hundred feet (600') from a school providing education to K-12 grades.

The project would comply with County Code Section 26.88.254 (Cannabis Cultivation Commercial), which specifies property setbacks for Riparian Corridor as "*Structures used for cultivation shall be located outside the Riparian Corridor Stream Conservation Areas (RC Combining Zone) and outside any designated Biotic Habitat area (BH combining zone).*"

The project is located in a riparian corridor area but meets the required setbacks as indicated in County Code Section. 26-88-254(f)(13). Please refer to Section 4, Biological Resources, for a more expanded discussion.

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 does not contain any active mines or known mineral resources that would require preservation and/or be impacted by the project. The project site is not located within an area of locally important mineral resource recovery, and the site is not zoned MR (Mineral Resources) (Sonoma County Aggregate Resources Management Plan, as amended 2010 and Sonoma County Zoning Regulations.)⁴²

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:

No locally important mineral resources are known to occur at the site. See item (a) above.

Significance Level: No Impact

13. NOISE:

Would the project result in:

⁴² Sonoma County Aggregate Resources Management Plan, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/Aggregate-Resource-Management/Maps-and-Diagrams/>, accessed 5/9/19

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:

Noise may be defined as loud, unpleasant, or unwanted sound. The frequency (pitch), amplitude (intensity or loudness), and duration of noise all contribute to the effect on a listener, or receptor, and whether the receptor perceives the noise as objectionable, disturbing, or annoying. The decibel scale (dB) is a unit of measurement that indicates the relative amplitude of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20dBs is 100 times more intense, 30 dBs is 1,000 more intense, and so on. In general, there is a relationship between the subjective noisiness, or loudness of a sound, and its amplitude, or intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. There are several methods of characterizing sound. The most common method is the "A-weighted sound level," or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is typically most sensitive. Thus, most environmental measurements are reported in dBA, meaning decibels on the A-scale. The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise generating source. Theoretically, the sound level of a point source attenuates, or decreases, by 6dB with each doubling of distance from a point, or stationary, source of sound, and 3 dB for each doubling of distance from a mobile source of sound.

Sound levels are also affected by certain environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and attenuation by barriers. When more than one point source contributes to the sound pressure level at a receiver point, the overall sound level is determined by combining the contributions of each source. Decibels, however, are logarithmic units and cannot be directly added or subtracted together. Under the dB scale, a doubling of sound energy corresponds to a 3 dB increase in noise levels. For example, if one noise source produces a sound power level of 70 dB, two of the same sources would not produce 140 dB – rather, they would combine to produce 73 dB.

County noise standards (as indicated in Table NE-2 of the General Plan) establish a maximum allowable exterior noise exposures of 50 dBA in the daytime (7:00 AM to 10:00 PM) and 45 dBA in the nighttime (10:00 PM to 7:00 AM), as measured using the L50 value (the value exceeded 50 percent of the time, or 30 minutes in any hour – i.e., this is the median noise level).

Maximum Allowable Exterior Noise Exposures for Non-transportation Noise Sources^(A)		
Hourly Noise Metric, dBA^(B)	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
L50 (30 minutes in any hour)	50	45
L25 (15 minutes in any hour)	55	50
L08 (4 minutes 48 seconds in any hour)	60	55
L02 (72 seconds in any hour)	65	60
Source: Sonoma County General Plan Noise Element Table NE-2		
(A) Pursuant to General Plan Policy NE-1C, the noise standards apply at the exterior property line of any adjacent noise sensitive land use.		
(B) The sound level exceeded n% of the time in any hour. For example, L50 is the value exceeded 50% of the time or 30 minutes in any hour; this is the median noise level.		

Potential sources of noise associated with any cannabis operations can include fans (circulation, ventilation, exhaust, etc.), blowers (heaters, etc.), and alarms (on equipment such as forklifts).

Ordinance No. 6198 and the updated Ordinance No. 6245 includes the following standard:

"Cultivation operations shall not exceed the General Plan Noise Standards table NE-2, measured in accordance with the Sonoma County Noise Guidelines."

The proposed project would include construction for the ADA bathroom, including water and wastewater connections. The indoor cultivation operation would not require any additional construction activities. Additionally, the project does not include a power generator nor will the project use heavy equipment such as forklifts. The project would source all energy from EverGreen-Sonoma Clean power. The project would incorporate two Cleanseal 800 fan filters inside the structure. The fan filter unit specifications list the sound emitted at 46-52 dB. Due to the fan's installation in the interior of the structure, minimal noise would escape. Additionally, due to the low trip generation associated with the project, road noise from related would also be minimal.

Based on review of the project plans and distance information obtained via Google Earth, the cultivation operation would be located at least 650 feet from off-site residences. These setbacks ensure that any noise associated with the cultivation operation would not expose persons to noise levels in excess of standards. Additionally, the project was reviewed by the Permit Sonoma Health to which they provided comments that a noise study was not required due to the project exceeding the noise setback distances associated with cannabis cultivation activities. Therefore, the project would not result in the increase in ambient noise.

Significance Level: Less than Significant Impact

b) Generation of excessive groundborne vibration or groundborne noise levels?

Comment:

According to the 2016 Medical Cannabis Land Use Ordinance Negative Declaration (Sonoma County 2016, page 20), "The nature of cannabis cultivation uses does not involve vibration or ground borne noises, except for potential impacts related to construction of related structures." Section 26-88-254 of the Municipal Code requires structures used for cannabis cultivation, including nurseries, to be located at least 600 feet from schools. These setbacks would ensure groundborne vibration levels dissipate before reaching any sensitive receptor locations.

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 project site is not within the Airport Referral Area as designated by the Sonoma County Comprehensive Airport Land Use Plan nor is it within the Petaluma Municipal Airport Referral Area. The project site is not within the vicinity of a private airstrip or within two miles of a public airport or public use airport. The project, therefore, would not expose people working in the project area to excessive noise levels.

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 site contains an existing single-family residential unit with a garage and a barn that was previously used for agricultural uses. The residential unit would remain onsite and is not part of the proposed project. New construction proposed by the project would include a single 100-square foot ADA-compliant bathroom to be constructed on the existing gravel pad. The proposed project would not result in permanent residents to the area which would induce substantial unplanned population growth in the area, either directly or indirectly.

Significance Level: Less than Significant Impact

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

Comment:

As addressed in the previous finding, the proposed project contains an existing single-family residential unit and barn which would remain onsite. The residential unit is not affiliated with the proposed Use Permit application. The proposed project would not displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere.

Significance Level: Less Than Significant Impact

15. PUBLIC SERVICES:

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

Comment:

Construction of the project would not involve substantial adverse physical impacts associated with provision of public facilities or services and the impact would be less than significant. No new housing is included within the project proposal. The project would employ four employees and would not necessitate or facilitate construction of new public facilities.

Significance Level: Less than Significant Impact

i. Fire protection?Comment:

The project would be located within the State Responsibility Area (SRA), under CalFire jurisdiction. The parcel resides in the San Antonio Volunteer Fire Department service area. County Code requires that all new development meet Fire Safe Standards (Chapter 13). The County Fire Marshal reviewed the project description and plans on October 17, 2018 and required 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. Because none of the standard conditions and/or requirements requires construction of new or expanded fire protection/EMS facilities, project impacts on fire protection/EMS would be less than significant.

Significance Level: Less than Significant Impact

ii. Police protection?Comment:

The Sonoma County Sheriff would continue to serve this area. There would be no increased need for police protection resulting from the project.

The proposed project does not include the creation of housing. The project would generate up to four jobs as part of the nursery operation. The project would not include construction of any homes or a substantial amount of businesses or infrastructure, and therefore would not induce substantial population growth. Existing police protection facilities would be adequate to serve the proposed project.

Significance Level: Less Than Significant Impact

iii. Schools?Comment:

Development fees to offset potential impacts to public services, including school impact mitigation fees, are required by Sonoma County Code and state law for new subdivisions and residential developments. The project does not include residential development and no new schools are reasonably foreseeable as a result. The project would not contribute to an increase in the need for expanded or additional schools.

Significance Level: No Impact

iv. Parks?Comment:

The proposed project does not include the development of residential uses and therefore would not result in the need for new park facilities.

Significance Level: No Impact

v. Other public facilities?Comment:

The project would not be served by public sewer or water facilities. Expansion or construction of additional types of public facilities is not anticipated as a result of this project.

Significance Level: No Impact

16. RECREATION:

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

Comment:

The proposed project would not involve activities that would cause or accelerate substantial physical deterioration of parks or recreational facilities. The proposed project does not include any residential use and as such would not lead to an increase in the use of existing neighborhood or regional parks or other recreational facilities.

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 proposed project does not involve construction of recreational facilities. See item 16.a. above.

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:

As discussed in the 2016 Negative Declaration for the cannabis ordinance (p. 44), increases in traffic generated as a result of cannabis operations were considered to be consistent with the General Plan 2020 and associated EIR, and therefore Ordinance No. 6198 was determined not to conflict with an applicable transportation/circulation plan. The 2016 ND (p. 44) also noted that while traffic impacts would vary with the type and size of individual cannabis operations (and number of employees), the greatest traffic generation anticipated would be for seasonal employee trips during the planting and harvest operations for outdoor cultivation. However, because the proposed project is an indoor operation that involves plantlets rather than fully grown plants, fewer employees would be necessary for operations and the resulting traffic generation would be less than for larger outdoor cultivation operations.

Due to the low average daily trips generated by the project, no traffic study was required by the Department of Transportation and Public Works. The project applicant submitted a "Cannabis Trip Generation" form as requested by the County. The proposed project would include four full-time employees. The Cannabis Trip Generation estimated the peak average daily trips (ADT) to be 21 daily trips.

According to the General Plan (Figure CT-4h),⁴³ I Street is a rural minor Collector. Average daily

⁴³ Sonoma County General Plan, Roadway Classifications: Sebastopol and Environs,

traffic volume measured by the County along I Street in the vicinity of the project site was 348 vehicles.⁴⁴ (Deer Creek Lane has no traffic volume information available.)

There are no marked bicycle facilities in the project vicinity, and neither I Street nor Deer Creek Lane has provisions for pedestrians. There are no paved shoulders on either road. The project does not propose any improvements to bicycle or pedestrian facilities. However, according to the General Plan 2020 (Figure CT-1h), a Class II bicycle lane is proposed for a small portion of I Street, although this portion is over a mile north of the project site.

The closest Sonoma County Transit stop is over 2 miles north of the project site at 4th Street and C Street.

The proposed project would not alter the roadway configuration, and any permanent increase in traffic due to employment would be minor compared to existing average volumes (approximately 6 percent increase in ADT for I Street).

Significance Level: Less than Significant Impact

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Comment:

Sonoma County has not yet adopted a Vehicle Miles Traveled (VMT) standard, therefore, guidance provided by the **California Governor's Office of Planning and Research** (OPR) in the publication *Transportation Impacts (SB 732) CEQA Guidelines Update and Technical Advisory*, 2018⁴⁵ is used to determine the impact. OPR's guidance for small projects, which is the classification under which the proposed project would fall, were applied.

The OPR Technical Advisory indicates that lead agencies may screen out VMT impacts using project size, maps, transit availability and provisions of affordable housing.

"Screening Threshold for Small Projects"

Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

OPR cites that the lead agency can use "screening thresholds," such as the one above, to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed traffic study. OPR based this presumption on substantial evidence and research demonstrating that project trips increase relatively linearly with building size and footprint. CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, which correlates to approximately 110 trips. Therefore, OPR has concluded

<https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/General-Plan/Roadway-Classifications-Sebastopol-and-Environs/>, accessed 5/8/19

⁴⁴ Sonoma County Department of Transportation & Public Works, Traffic Surveys, <https://www.arcgis.com/apps/webappviewer/index.html?id=5c2f8748449c4dcea7619b723d3463b1>, accessed 5/8/19.

⁴⁵ Technical Advisory on Evaluating Transportation Impacts in CEQA, https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf, accessed 8/6/20

that 110 trips or less is a potential indicator of small projects that would not typically require a quantitative VMT analysis.

The proposed project would generate 21 trips per day, well below the 110 trips per day referenced by OPR. Based on this assessment, the proposed indoor cannabis nursery facility can be classified as a small project based on guidance provided by OPR and may be presumed to result in a less-than-significant VMT impact.

Significance Level: Less than Significant Impact

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

Comment:

The project would not increase hazards because it would not change the existing alignment of any roadway. There are no sharp curves or dangerous intersections on the private road of Deer Creek Lane.

Significance Level: Less than Significant Impact

d) Result in inadequate emergency access?

Comment:

The existing access road to the project site complies with all emergency access requirements of the Sonoma County Fire Safety Code (Sonoma County Code Chapter 13), including emergency vehicle access requirements. The access road (I Street) is approximately 20 feet in width. The parcel has a driveway that is 0.8 feet of compacted class 2 aggregate and has a large 40' turnaround at the end of the existing driveway. There are no bridges on the parcel. Project plans would require review by a Department of Fire and Emergency Services Fire Inspector during the building permit process to ensure compliance with emergency access issues.

The proposed project was referred to the Sonoma County Fire and Emergency Services, which stipulated conditions of project approval (10/17/2018), including a pre-operational fire inspection, installation of fire suppression consist with the occupancy type, 20-foot-wide access roads, emergency water supply, and vegetation management.

Significance Level: Less than Significant Impact

f) Result in inadequate parking capacity?

Comment:

Sonoma County Code Section 26-86 includes no specific parking requirements for cannabis nursery land uses; however, the project would not be open to the public, therefore, no public parking spaces are required. Employees would park on a gravel parking lot directly adjacent to the structure.

Significance Level: Less than Significant Impact

18. TRIBAL CULTURAL RESOURCES:

a) 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 5020.1(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:

Results from a cultural resources records search from the Northwest Information Center (CHRIS-NWIC), an archaeological field survey, and a Native American Sacred Lands File Search through the Native American Heritage Commission indicate that there are no known Traditional Cultural Resources (TCR) or unique archaeological resources associated with TCR's located within the parcel.⁴⁶ Additionally, during the application process Sonoma County notified the tribes of the proposed project. To date, Lytton Rancheria, Stewarts Point Rancheria Kashia Band of Pomo Indians and Graton Rancheria have all supplied responses of no comment to the project planner.

Based on the former location of the San Antonio District Schoolhouse, the known Native American prehistoric site (P-49-000419; Culver Site) located approximately 0.20 miles northeast of the project site, the close proximity of Deer Creek and associated flora and fauna resources that transverse the northern end of the project site, and the documented ethnographic history of Native Americans within Sonoma County, the project site has a moderately high to high potential of yielding subsurface archaeological resources relating to TCRs and unique archaeological resources. As a result, recommended mitigation measures are provided to reduce potentially significant impacts to less than significant level regarding previously undiscovered TCRs or unique archaeological resources that may be accidentally encountered during project implementation to less than a significant level.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measures: CULT-1, CULT-2, and CULT-3 (see Section 5, Cultural Resources)

Mitigation Monitoring:

Mitigation Monitoring: CULT-1, CULT-2, and CULT-3

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**

⁴⁶ Evans and De Shazo, Inc. 28, March 2019. Results of a Cultural Resources Study for the Proposed Cannabis Cultivation Project at 205 Deer Creek Lane, City of Petaluma, Sonoma County, California. Prepared by Evans and De Shazo, Inc. Sebastopol, California 95472; prepared for Node Labs, Inc. (Chris Leavitt). The Cultural Resources Study is on file at the Northwest Information Center at Sonoma State University.

facilities, the construction or relocation of which could cause significant environmental effects?

Comment:

As discussed throughout this Initial Study, the project would use the existing site well, located across the street, for its water supply. Also, the project would use an existing on-site septic system for wastewater disposal, which has a capacity of approximately 1,500 gallons. BC Engineering Group performed a Tier 2-Findings Report which concluded that the 1,500-gallon, concrete, two-compartment septic tank and leach field serving the parcel appeared to be in good condition. In addition, the study noted that the reserve area is available and unencumbered.⁴⁷ The project would be required to meet County standards for on-site wastewater disposal. Because the project is using an existing well that is already connected to the barn with existing pipeline and an existing septic system, and given the small number of employees (4), the project would not result in the relocation or construction of new or expand water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities.

Significance Level: Less than Significant Impact

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

Comment:

As discussed in the Section 10, Hydrology, of this initial study, the project would use the existing well which is located on the parcel, 840 feet east of the southern tip of the parcel. The proposed project is located within a Class 4 Groundwater Area. As required by PRMD Policy 8-1-14, the project submitted a hydrogeologic study (May 15, 2018) which concluded that the well has sufficient storage volume to provide water for the project, including the existing domestic water demand.

Significance Level: Less than Significant 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:

The cannabis operation would be served by an existing septic system located on the parcel with enough capacity to serve the proposed project. As discussed in section (a), the existing septic tank has adequate capacity to serve the project. The project would produce a small amount of wastewater from nursery activities. This non-hazardous wastewater would include nutrient gel containing plant residue. In the applicant supplied waste management plan, prepared by GAIACA,⁴⁸ it is estimated that the project would create approximately 220 gallons of non-hazardous wastewater per month. This wastewater would be stored in one 250-gallon waste tank prior to removal by a licensed cannabis waste handler who would transport it to a wastewater treatment facility off-site located at 120 Calle Del Oaks, Suite B in Del Rey Oaks, CA 93940. The licensed cannabis waste handler is Gaiaca LLC, located at 120, Calle Del Oaks, Suite B, Del Rey Oaks, CA 93940. The wastewater would be subject to applicable local (Public Safety Element of the Sonoma County General Plan 2020), state (Title 22, California Code of Regulations), and federal regulations (Resource Conservation and Recovery Act).

Significance Level: No Impact

⁴⁷ BC Engineering Group, "Tier 2 – Findings Report," September 26, 2019

⁴⁸ GAIACA, "Cannabis Non-Hazardous Waste Management Plan, Node Laboratories,"

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:

Sonoma County has an existing solid waste management program 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 would result from the proposed project. In addition, Ordinance No. 6198 includes the following standard, which the County would require as a Condition of Approval:

“(8) Waste Management. A Waste Management Plan addressing the storing, handling and disposing of all waste by-products of the cultivation and processing activities in compliance with the Best Management Practices issued by the Agricultural Commissioner shall be submitted for review and approval by the agency having jurisdiction. This plan shall characterize the volumes and types of waste generated, and the operational measures that are proposed to manage and dispose or reuse the wastes in compliance with Best Management Practices and County standards. All garbage and refuse on this site shall be accumulated or stored in non-absorbent, water-tight, vector resistant, durable, easily cleanable, galvanized metal or heavy plastic containers with tight fitting lids. No refuse container shall be filled beyond the capacity to completely close the lid. All garbage and refuse on this site shall not be accumulated or stored for more than seven calendar days, and shall be properly disposed of before the end of the seventh day in a manner prescribed by the Solid Waste Local Enforcement Agency. All waste, including but not limited to refuse, garbage, green waste and recyclables, must be disposed of in accordance with local and state codes, laws and regulations. All waste generated from cannabis operations must be properly stored and secured to prevent access from the public.”

Significance Level: Less than Significant Impact

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

Comment:

Sonoma County has access to adequate permitted landfill capacity to serve the proposed project. The project would not produce a substantial amount of solid waste.

Significance Level: No Impact

20. WILDFIRE

According to Cal Fire, the proposed project is located in a State Responsibility Area, with a Fire Hazard Severity Zone (FHSZ) designated as “Moderate” (CalFire, 2007). Moderate FHSZ’s include a) wildland areas of low fire frequency supporting modest fire behavior; and b) developed/urbanized areas with a very high density of non-burnable surfaces and low vegetation cover that is highly fragmented and low in flammability. The nearest high and very high FHSZ’s are located over three miles to the northeast in the dry grassland area of Petaluma area.

If located in or near state responsibility areas or lands classified as very high fire severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Comment:

Implementation of the project would not adversely impact an adopted emergency response or

emergency evacuation plan. The proposed project would be required to comply with the standards identified in Sonoma County Code Chapter 13 and County Fire Safe Standards, and to conform to State Building Code requirements, which include, among other provisions, requirements for emergency access and road naming and addressing, minimum emergency water supply, fuel modification, defensible space and vegetation management and sprinklers within the structure. These requirements were adopted to ensure safe ingress for emergency vehicles to and from the site in the event of an emergency. As discussed in Section 17.a, the project would not result in a significant increase in vehicle trips, with an additional 21 average daily trips projected. Project compliance with County Fire Safety Standards and review by the San Antonio Volunteer Fire Department would ensure that the project would have a less-than-significant impact related to emergency response and evacuation planning.

Significance Level: Less than Significant Impact

b) 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?

Comment:

The project site is located at 205 Deer Creek Lane, in an unincorporated, rural agricultural area of Sonoma County, approximately 2.75 miles southeast of downtown Petaluma, California. The project site is in a Moderate FHSZ. The barn where nursery activities would take place are immediately surrounded by grassland, with trees along drainages. Though the project would not include an overnight housing component, it would employ four (4) individuals, which for the purpose of assessing wildfire risk to people may be considered project occupants. In addition, there is an existing residence located on the parcel. The proposed project consists of a Conditional Use Permit for the conversion of a 2,000 square foot existing agricultural barn use to an indoor cannabis nursery use.

The project parcel is generally flat with a maximum elevation of approximately 505 feet MSL near the southernmost point and a minimum elevation of approximately 175 feet MSL along Deer Creek. The parcel slopes gradually from northwest to the southeast and from the southeast to the northwest converging on Deer Creek.⁴⁹ Sonoma County experiences prevailing winds predominantly from the south and southwest.⁵⁰ Winds generally range in strength from 5-10 mph, but can increase to 10-15 mph. The climate of inland Sonoma County is typically warm and dry with temperatures ranging from 80° - 100° F during the summer. As a result, winds are typically warm and dry. Strong winds can not only exacerbate fires, but also facilitate the spread of pollutant concentrations from the origin site of a fire. Pollutant concentrations are toxic chemicals and materials, including smoke, carbon dioxide, ozone, particulate matter, organics, and aerosol particles, that can travel airborne and negatively impact the health of people and environments. Because pollutant concentrations travel through the air uninhibited, they can travel long distances and are difficult, if not impossible, to contain. Preventing the ignition and spread of wildfire are the only ways to prevent spread of pollutant concentrations by fire.

The topography, including slope, and environmental features, including prevailing winds and vegetation types, of the project property and the project vicinity are not typically indicative of an area subject to significant wildfire hazard. Cal Fire's Moderate FHSZ designation for the project vicinity reflects the area's moderate risk of wildfires. Project occupants and occupants of neighboring residences are subject to moderate risk of exposure to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

⁴⁹ Hurvitz Environmental. May 15, 2018. Hydrogeologic Assessment Report 205 Deer Creek Lane, Petaluma, Sonoma County, pg 2.

⁵⁰ Fire Safe Sonoma. 2016. Sonoma County Community Wildfire Protection Plan. Available at: <https://www.firesafesonoma.org/wp-content/uploads/cwpp-final.pdf> [Accessed 9/23/19]

The Sonoma County Fire Safety Ordinance (Chapter 13 of the County Code, often referred to as the "Fire Safe Standards") establishes minimum fire safe standards to ensure that all new development within the unincorporated area of the county provide a basic level of fire protection. The Fire Safe Standards include requirements for emergency access, minimum emergency water supply, fuel modification and defensible space, sprinklers, and road naming and addressing. The County's Fire Safe standards are more stringent than those required by the California Fire Code. Prior to project approval, the County would ensure the project design meets all requirements of Fire Safe Standards, including the minimum building fire separation distances detailed in Tables 495.4 (A) and 4905.4 (B) based on building structure materials. Construction of the project would also be required to conform to County Fire Safe Standards, including maintaining unobstructed emergency access. In addition, pursuant to Public Resource Code 4442, the Applicant would be required to include a note on all construction plans that internal combustion engines be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire.

In addition to its Fire Safe Standards, the County also implements Chapter 13A of the Sonoma County Code of Ordinances, Abatement of Hazardous Vegetation and Combustible material. Chapter 13A provides requirements for maintaining parcels in a manner that reduces wildfire risks. The portions of Section 13A-4 that may be applicable to the proposed project include, but are not limited to:

- 1) Maintain a thirty-foot defensible space around all buildings/structures.
 - a. The grass needs to be cut six (6") inches or less.
 - b. The tree branches need to be limbed up six (6') from the ground.
- 2) Additional defensible space outward to one hundred feet (100') from all buildings and surroundings, neighboring structures may be required depending on the property slope, fuel load and/or fuel type.
 - a. Fuel load – Amount of vegetation.
 - b. Fuel type – Type of vegetation.
 - c. Property Slope – Steepness of property.
- 3) Remove all portions of trees within ten feet (10') of chimney and/or stove pipe outlets.
 - a. Property owners are responsible for maintaining trees year-round.
 - b. Trees need to be cut ten feet (10') away from the chimney in any direction
- 4) Maintain trees adjacent to or overhanging a structure free of dead/dying wood.
 - a. Remove any leaves, needles, branches, or debris from the roof and/or gutters.
- 5) Maintain the roof of any structure free of leaves, needles or other dead/dying wood.
 - a. Remove any leaves, needles, branches, or debris from the roof and/or gutters.
- 6) Provide street address numbers that are clearly visible from the roadside, minimum height: Four inches (4").
 - a. The address numbers shall be posted on the house.
 - b. If the house sits back from the street, post the address at the beginning of the driveway and on the house.
 - c. The address numbers shall be in a contrasting color for visibility.
- 7) Remove all tree limbs within six feet (6') of the ground.
 - a. Remove lower hanging tree branches from the ground up six feet (6').
- 8) Remove dead/dying vegetation from property.
 - a. Remove any and all dead/dying vegetation from the property.

As a condition of project approval, the Project would be required to submit a Fire Prevention Plan, which, subject to Fire Department review and approval, would provide information related but not limited to on-site communications and contact information, emergency water supply, installation of dry fire hydrant, increased water storage with a 2,500-gallon water storage tank, employee training for use of fire code-regulated materials, and a site map.

All commercial cannabis operations are required under Ordinance No. 6245 Sec. 26-88-254(f)(16) to prepare and submit a Fire Prevention plan and to obtain any permits required from the Fire and Emergency Services Department. The Fire Prevention plan shall include how the project will meet the Fire Code Requirements including, but not limited to, emergency vehicle access and turn-around at the facility site(s), vegetation management and fire break maintenance around all structures.

Application of County Fire Standards and related County and State fire standards would reduce risk of exposing people or structures to wildfire risks, and therefore project impacts would be less than significant.

Significance Level: Less than Significant Impact

- c) **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?**

Comment:

The proposed project is located on a site that was previously developed with an agricultural barn and single family residential dwelling. In accordance with Chapters 13 and 13A of the County Code of Ordinances, the project would be required to comply with County standards for emergency access, minimum emergency water supply (on-site), fuel modification and defensible space, and sprinkler installation. As discussed in Section 10.a and 20.b, the project would be required to submit a Fire Protection Plan, for Fire Department review and approval, that includes existing emergency vehicle turnaround space (hammerhead turnaround), a proposed 2,500-gallon water supply for fire suppression, installation of a dry fire hydrant, employee training in fire safety, vegetation management, and fire break maintenance. The project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or on-going impacts to the environment.

Significance Level: Less than Significant Impact

- d) **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:

The parcel is generally flat with a maximum elevation of approximately 505 feet MSL near the southernmost point and a minimum elevation of approximately 175 feet MSL along Deer Creek. Although the parcel is generally flat, there are gradual slopes from northwest to the southeast and from the southeast to the northwest converging on Deer Creek.

The location of the barn is relatively flat. The entire parcel has a site topography which slopes from the northwest to the southeast and from the southeast to the northwest converging on Deer Creek, which intersects the site along its southwest boundary. The slope of the hills to the north and south of the project site is gentle, and drainage patterns suggest stormwater is directed southwest of the project site, toward Deer Creek. Based on the slopes and drainage patterns present at the site, the project would not 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. The Sonoma County GIS tool does not classify the parcel as residing in a Geologic Hazard zoned designation nor is it located in a flood prone area.

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:

Potential project impacts on special status plant and fish/wildlife species and habitat are addressed in Section 4. Implementation of the required Mitigation Measures (Mitigation Measures BIO-1 through BIO-3) would reduce these potential impacts to a less-than-significant level. Potential adverse project impacts to cultural resources are addressed in Section 5. Implementation of the required Mitigation Measures (Mitigation Measures CUL-1 through CUL-3) would reduce these potential impacts to a less-than-significant level. Potential adverse project impacts to Tribal Cultural Resources are addressed in Section 18. Implementation of the required Mitigation Measures (Mitigation Measures CUL-1 through CUL-3) would reduce these potential impacts to a less-than-significant level.

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:

No project impacts have been identified in this Initial Study that are individually limited but cumulatively considerable. The project would contribute to impacts related to biological resources, cultural resources and tribal cultural resources which may be cumulative , but mitigations would reduce project impacts to less-than-significant levels.

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:

Cannabis operations have the potential to cause substantial adverse impacts on human beings, both directly and indirectly. However, all potential impact and adverse effects on human beings (resulting from air quality/odors, noise, traffic) were analyzed, and would be less than significant with the mitigations identified in the Initial Study incorporated into the project.

Significance Level: Less than Significant Impact

References

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7. California Department of Forestry and Fire Protection, "Land Cover Map," http://rap.fire.ca.gov/data/rapgismaps/pdfs/fvegwhr13b_map.pdf, accessed 4/24/19
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9. Shuford, W. D. and Gardali, T. 2008. California Bird Species of Special Concern. Western Field Ornithologists and California Department of Fish and Game. Sacramento, CA.
10. Evans and De Shazo, Inc. 28, March 2019. Results of a Cultural Resources Study for the Proposed Cannabis Cultivation Project at 205 Deer Creek Lane, City of Petaluma, Sonoma County, California. Prepared by Evans and De Shazo, Inc. Sebastopol, California 95472; prepared for Node Labs, Inc. (Chris Leavitt). The Cultural Resources Study is on file at the Northwest Information Center at Sonoma State University.
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