Pursuant to Section 15071 of the State CEQA Guidelines, this proposed Mitigated Negative Declaration and the attached Expanded 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:** UPC17-0018; TRV Corp (Cannabis Cultivation Operation)

**Project Applicant/Operator:** Michael Wright, Chief Executive Officer for TRV Corp.

**Project Location/Address:** 6095 Bodega Avenue

**APN:** 022-200-002 & 022-200-042

**General Plan Land Use Designation:** Land Extensive Agriculture 60-acre density (LEA 60)

**Zoning Designation:** Land Extensive Agriculture 60-acre density, Accessory Dwelling Unit Exclusion, Riparian Corridor 50-foot setback, Scenic Resources – Scenic Corridor (LEA B6 60 Z, RC50/50, SR)

**Decision Making Body:** Sonoma County Board of Zoning Adjustments

**Appeal Body:** 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

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Abbreviation*</th>
<th>Yes</th>
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<tr>
<td>Aesthetics</td>
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<tr>
<td>Agricultural &amp; Forest Resources</td>
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<td>Mandatory Findings of Significance</td>
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RESPONSIBLE AND TRUSTEE AGENCIES

Table 2 lists other public agencies whose approval is required for the project, or who have jurisdiction over resources potentially affected by the project.

Table 2. Agencies and Permits Required

<table>
<thead>
<tr>
<th>Agency</th>
<th>Activity</th>
<th>Authorization</th>
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<tr>
<td>California Department of Food and Agriculture (CalCannabis)</td>
<td>Cannabis cultivation</td>
<td>Cultivating Licensing</td>
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<tr>
<td>California Department of Fish and Wildlife</td>
<td>Cannabis cultivation</td>
<td>Fish and Game Code, Section 1602 Notification</td>
</tr>
<tr>
<td>Regional Water Quality Control Board (North Coast)</td>
<td>Cannabis cultivation</td>
<td>Cannabis Cultivation Waste Discharge Regulatory Program or Waiver of Waste Discharge Requirements</td>
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</table>
ENVIRONMENTAL FINDING:

Based on the evaluation in the attached Expanded 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 project plans.

Prepared by: Crystal Acker, Project Planner 2/14/2020
I. INTRODUCTION

TRV Corp proposes to construct and operate a mixed light commercial cannabis facility on a developed agricultural parcel, as permitted by the Sonoma County Cannabis Ordinance. A referral letter was sent to the appropriate local, state and federal agencies 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 Crystal Acker with the Sonoma County Permit and Resource Management Department, Project Review Division. Information on the project was provided by TRV Corp. Technical studies provided by qualified consultants, other reports, documents, maps and studies referred to in this document are available for review at the Permit and Resource Management Department (Permit Sonoma) or at the following web address: https://links.sonoma-county.org/XaDcKE4sO_i/

Please contact Crystal Acker, Planner III, at (707) 565-8357, for more information.

II. EXISTING FACILITY

The project site is located at 6095 Bodega Avenue, in an unincorporated, rural agricultural area of Sonoma County, approximately 6 miles northwest of downtown Petaluma (Figure 1). The 7.59 acre site is developed with an existing residence, garage, several storage containers, and other small outbuildings. The residence is served by an existing domestic septic system and water well. Access to the project site is from Bodega Avenue down a private gravel road- Raven Road.

The rest of the site is composed of pastureland and a small ephemeral drainage channel. Portions of the property have been leased for horse and cattle grazing in the past. The current lease is for cattle grazing on approximately 4 acres.

III. PROJECT DESCRIPTION

TRV Corp proposes a commercial mixed light cannabis operation in a new 14,000 square foot greenhouse. One existing storage container would be removed; no existing structures would be used in the operation. The greenhouse would provide 10,000 square feet of mixed light canopy/flowering space (Type 2B state license), and 2,500 square feet of vegetative (non-flowering)/propagation space, in addition on-site processing of site-grown cannabis, and support spaces, including a restroom, office,
security closet, and storage spaces. No retail sales would be conducted at the facility and it would not be open to the public. Cultivation activities within the greenhouse would be permitted 24-hours per day, seven days per week, as needed, although typically, employees would not be working overnight. The operation does not include regular overnight duties, but occasionally employees may need to be present overnight for specific tasks, such as monitoring or testing irrigation and climate control equipment. Deliveries and shipping would be limited to 8:00 a.m. to 5:00 p.m. Monday through Friday. At full occupancy, the proposed commercial cannabis facility would employ up to six full-time positions, with one employee living on-site in the existing residence. More details are provided on specific components of the proposed operation below. Figures 2 and 3 provide an aerial view and site photographs of the project site. Figure 4 provides a site plan illustrating where specific project components would be located on the property.

**Cultivation Facility**

A new 24-foot-high, single-story, metal-frame, light-duty greenhouse structure supported by an approximately 14,615 square foot concrete slab-on-grade floor would be constructed to house the proposed cannabis operation. The approximately 14,000 square foot greenhouse facility would provide up to 10,000 square feet of mixed light flowering cultivation area within three internally divided mixed light cultivation rooms. Two of the three rooms would be approximately 3,500 square feet in size, and the third would be approximately 3,000 square feet in size (Figure 4). The building will also contain a 1,000-square-foot propagation room with shelving for 2,500 square feet of propagation area for plants in the vegetative stage, mother plants, and plant cloning. The remainder of the building, approximately 3,000 square feet, would consist of space for cannabis processing and support functions, including a utility corridor, video room, vault rooms, electric facility room, drying room, trimming room, storage rooms, and an ADA-compliant rest room.

The greenhouse would include nine 54-inch ventilation fans and three 24-inch ventilation fans that would run based on temperature, operating primarily during the day, with occasional nighttime use when temperatures remain above 85 degrees at night. Up to two air conditioning units (Bryant model 280ANV060 or similar) would be located near the north corner of the building and operated only during the daytime for vegetation areas. Odor control units that emit natural essential oils to extract and minimize odors would be placed on greenhouse exhaust fans.

Interior lighting would operate up to 18 hours on and 6 hours off to provide the ideal environment for cannabis cultivation. Lighting inside the greenhouse and propagation room would include 170 high pressure sodium grow lights (1000 Watt) or energy-efficient LED lights. The greenhouse would include retractable curtain systems designed to fully contain the interior lights such that no light would escape between sunset and sunrise and no light would be visible from neighboring properties. Outdoor lighting would include dark sky compliant security flood lights with motion sensors confined to the building facade.

One outdoor emergency generator (Caterpillar model D60-4LC with sound-rated enclosure or similar) would be located at the rear of the building to support fire and security systems in the event of a power outage. The backup generator would require occasional testing which would occur during daytime hours.

**Utility Improvements**

The estimated annual water use for the project is 514,860 gallons, which equates to approximately 1.58 acre-feet of groundwater use per year from an existing well. No additional well development is required
to support this use; however, rainwater capture and storage facilities are proposed. The project would include a rainwater catchment system to capture runoff from the roof structure of the greenhouse. Four 5,000-gallon rainwater collection tanks would be installed for irrigation and fire suppression (20,000 gallons total from rainwater capture). An additional 30,000 gallons of storage tanks filled with well water would be provided for fire suppression. For the purposes of analysis in this Initial Study, it is assumed that two 15,000-gallon water storage tanks would be utilized, each of which would be approximately 15.5 feet in height. Locations of proposed water tanks are shown on Figure 4. To provide sufficient flow and water pressure to operate fire suppression systems (50,000 gallons total), a new commercial electrical power line and transformer would be installed and an existing 1,000 gallon on-site propane tank would be moved up to the new greenhouse location. An existing well (installed in 2018) would be connected to both the new cannabis facility and the existing residence. The older domestic well would not be used in the operation and instead would be used as a monitoring well.

The project proposes collection and conveyance of storm water from new impervious surfaces (other than the roof) to a new on-site detention basin that would be sized to treat storm water runoff in accordance with the County requirements.

For wastewater disposal, the project would include an approximately 850 gallon pressure distribution septic system. A concrete septic tank and pre-treatment unit would be connected to a flush line, which would transport the wastewater to the dispersal area in compliance with the North Coast Regional Water Quality Control Board and County standards. No changes are purposed to the domestic septic system, which will continue to serve the on-site residence separately from the cannabis operation.

**Access Road, Driveway, and Parking Improvements**

Improvements would be made to the private roadway entrance immediately adjacent to Bodega Avenue to allow for the smooth and safe movement of vehicles entering and exiting Bodega Avenue. The driveway apron would be improved to conform to American Association of State Highway and Transportation Officials (AASHTO) standards. The improved area would be surfaced with asphalt concrete a minimum distance of 25 feet from the existing edge of the roadway.

A new paved access from Raven Road, including emergency vehicle turnaround space and a parking area, would be constructed adjacent to the new cultivation building. The parking area would provide 8 parking spaces plus one accessible space compliant with the Americans with Disabilities Act Standards for Accessible Design.

A screened and covered waste enclosure would be located adjacent to the parking spaces.

**Other Site Improvements**

The project would include electronic security and surveillance systems. Existing fencing along the property would be utilized, with additional no climb chain link security fencing to be installed around the greenhouse. A new metal gate would be utilized with a key pad entry system for employee and delivery truck access.

An approximately 3-foot-high retaining wall would be constructed along the eastern portion of the greenhouse to minimize grading into the hillside. Landscaping on the project site would include drought-tolerant and fire-resistant trees and shrubs, such as oceanspray (*Holodiscus discolor*) and Pacific rhododendron (*Rhododendron macrophyllum*). The project would provide landscaping to screen the improvements at the project site, including trees planted with the intent of forming a relatively dense
hedge for aesthetic screening around the proposed greenhouse and water storage tanks. Landscape irrigation would be provided by a microspray system on automatic timer controls.

Construction

Project construction is anticipated to be completed in a single phase and require approximately 6 months to complete. The anticipated construction work hours are 7:00 a.m. to 5:00 p.m. Monday through Saturday. Prior to construction, the applicant’s contractor would mobilize construction equipment and materials to the project site and may place a job site trailer and portable sanitary facilities on the site. Construction vehicles and haul trucks accessing the project site would use Bodega Avenue and Raven Road. Construction staging areas would be established on the project site adjacent to the proposed improvement areas.

Construction is anticipated to begin with site preparation, including clearing and grading to provide a relatively level surface for the movement of construction equipment. Site clearing and grubbing would remove select trees, grass, and other vegetation. One to two eucalyptus trees would be removed from the project site to accommodate construction of the project. Following site preparation, the project site would be rough graded to elevations shown on final improvement plans and in accordance with recommendations in the project’s design-level geotechnical study. Rough grading activities would include building pad preparation, grading of roadways, and installation of erosion and sediment control features. Vertical construction activities would include construction of the greenhouse and other site improvements. The final phase of construction is anticipated to include establishment of landscape plantings, storm water detention areas, irrigation systems, and finished hardscapes.

A variety of construction equipment would be anticipated to construct the project, including an excavator, bulldozer, backhoe, grader, forklift, cement mixers, pavers, rollers, chainsaws, generators, air compressors, welders, and other general construction equipment. Soil and other materials found unsuitable for reuse at the project site would be disposed of at a regional landfill or transfer station. The project is anticipated to have a balanced on-site cut and fill of approximately 600 cubic yards. It is estimated that the project would disturb approximately 0.85 acre of land and create approximately 0.5 acre of new impervious surface, including the new greenhouse, parking, and driveway improvements.

IV. SETTING

The project site is located in an unincorporated, rural agricultural area of the Petaluma Dairy Belt, approximately 6 miles northwest of downtown Petaluma. Access to the project site is from Bodega Avenue and Raven Road. Surrounding land uses are predominantly pasture land, dairy and poultry farms, horse and canine facilities, and rural residential development. Nearby commercial operations include McClelland’s Dairy, Reichardt Duck Farm, and Two Rock Dog Ranch.

Vegetation on the project site mostly consists of non-native annual grassland. There are a few ornamental trees, live oak, and eucalyptus around the existing residence and farm buildings. Two drainage features also occur on the parcel, although neither is in the project area. An unnamed ephemeral drainage channel located about 50 feet to the southwest of the project footprint supports mostly grasses, but also scattered willow scrub vegetation, including willows, Himalayan blackberry, poison hemlock, and a few redwoods (which appear to be planted). A second unnamed blue-line stream channel is present adjacent to Bodega Avenue and bisects the access road through an underground
culvert. This stream is a County-designated Riparian Corridor with a 50-foot Streamside Conservation Area setback. However, no vegetation is present within the project parcel and no project activities are proposed at or adjacent to this location. Both waterways are eventual tributaries to Stemple Creek.

Site elevation ranges from about 140 feet at the driveway entrance to 215 feet at the eastern property boundary; the project footprint is in the upper eastern portion of the property, ranging from about 185 feet to 210 feet.

The site is located in a Groundwater Availability Class 2 – Major Natural Recharge Area, and is not within a Medium or High Priority basin defined under the Sustainable Groundwater Management Act (SGMA). The nearest SGMA basin is Petaluma Valley, about 2 miles to the east.

According to the Wildland Fire Hazard Area map in the Sonoma County General Plan, the project site is located in the State Responsibility Area, and is designated as a Moderate Fire Hazard Severity Zone. The site is designated as Tier 2 – Elevated on the California Public Utilities Commission Fire Threat Map.

The General Plan Land Use Designation on the parcel is Land Extensive Agriculture 60-acre density. The site is also designated Land Extensive Agriculture by the Petaluma Dairy Belt Area Plan. The General Plan and Countywide Bicycle and Pedestrian Master Plan identify a proposed Class II bikeway along Bodega Avenue in the project area.

Regional access to the project site is from Bodega Avenue, which is identified as a Rural Minor Arterial (later recategorized to a Major Collector) and Scenic Corridor in the Sonoma County General Plan. Figure 5 provides existing views towards the project site from Bodega Avenue.
Existing view of project site where greenhouses would be constructed.

Existing structures and single-family residential home located on the project site.
AMENDO PLANTING SOIL REVIVE SPECIFICATIONS

1. AMENDO PLANTING SOIL REVIVE WITH THE RECOMMENDED SURFACE TRENCHES
2. AMENDO PLANTING SOIL REVIVE TO 15," DEEP
3. AMENDO PLANTING SOIL REVIVE TO 10," DEEP
4. AMENDO PLANTING SOIL REVIVE TO 6," DEEP
5. AMENDO PLANTING SOIL REVIVE TO 3," DEEP
6. AMENDO PLANTING SOIL REVIVE TO 0," DEEP

DRAWINGS PREPARED FROM INFORMATION MADE AVAILABLE BY THE OWNER AND ARE NOT A GUARANTEE OF EXISTING OR CONCEALED CONDITIONS. TOPOGRAPHIC AND REFERENCE LOCATIONS ARE BASED ON SITE SURVEY DATED "DATE OF SURVEY" PREPARED BY SURVEYOR LISTED ON SHEET A000 - PROJECT DIRECTORY.

FINISHED FLOOR ELEVATIONS INDICATED ARE FOR BUILDING(S) ONLY. REFER TO CIVIL ENGINEERING DRAWINGS FOR ELEVATIONS RELATIVE TO THE REST OF THE SITE AND FOR SITE FEATURES NOT OTHERWISE INDICATED.

EXTERIOR CONCRETE FLATWORK: MAXIMUM SLOPE OF 1:20, U.NO.; EXTERIOR DOOR LANDINGS SHALL SLOPE 1/4" PER FOOT MAXIMUM FOR DRAINAGE. CONCRETE SHALL SLOPE MINIMUM 1/8" PER FOOT AWAY FROM BUILDINGS. CONCRETE WALKS PER DETAIL 4/38.

NEATLY CUT AND REMOVE SURFACES AND FINISHES AS REQUIRED OR TO A NATURAL POINT OF DIVISION TO ENABLE INSTALLATION OF UTILITIES OR OTHER CONCEALED WORK, WHETHER SPECIFICALLY SHOWN OR INFERRED FOR SUPPORT OR RENOVATION.

EXCAVATIONS: BACKFILL AND COMPACT PROMPTLY AS WORK PROGRESSES. MINIMIZE OPEN TRENCHES.

FINAL GRADE: RAKE SMOOTH TO ONE-TENTH FOOT TOLERANCE. ALLOW FOR TOPSOIL PLACEMENT, IRRIGATION SLEEVE PLACEMENT AND LANDSCAPE PLANTING.

UNDERGROUND WORK: ROUTE TO AVOID CONFLICT WITH INDICATED LANDSCAPING AND TREES.

TREE PROTECTION: PROTECT EXISTING TREES AND VEGETATION TO REMAIN BY FENCING TO THE DRIP LINE AND AS OTHERWISE REQUIRED BY THE OWNER'S ARBORIST. DO NOT TRIM OR MODIFY EXISTING TREES WITHOUT WRITTEN APPROVAL OF THE OWNER. IF EXISTING TREES CONFLICT WITH PROPOSED WORK, REQUEST INSTRUCTIONS IN WRITING.

DATUM ELEVATIONS REFERENCE THE TOPOGRAPHICAL SURVEY (100'-0" = LEVEL 1 F.F.) FOR BUILDING HEIGHTS ABOVE GRADE REFER TO ELEVATIONS SHEETS A200-A203

SITE GRADING: THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 20 UNITS HORIZONTAL (5% SLOPE) FOR MINIMUM DISTANCE OF 10' MEASURED PERPENDICULAR TO THE FACE OF THE WALL.

IMPERVIOUS SURFACES WITHIN 10 FT. OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2% AWAY FROM THE BUILDING.

GENERAL NOTES - SITE PLAN

1. TOPOGRAPHIC SURVEY TOLERANCE 1'-0" ABOVE GRADE.
2. ALL USE MODEL 001 COTTONWOOD MEETING TO STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS.
3. ALL USE MODEL 001 COTTONWOOD MEETING TO STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS.
4. ALL USE MODEL 001 COTTONWOOD MEETING TO STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS.
5. ALL USE MODEL 001 COTTONWOOD MEETING TO STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS.
6. ALL USE MODEL 001 COTTONWOOD MEETING TO STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS.
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9. ALL USE MODEL 001 COTTONWOOD MEETING TO STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS.
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11. ALL USE MODEL 001 COTTONWOOD MEETING TO STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS.
12. ALL USE MODEL 001 COTTONWOOD MEETING TO STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS.

SITE PLAN - ENLARGED

FIGURE 4

Site Map
Existing view from Bodega Avenue looking southeast toward the project site. Existing vegetation screens the project site from view.

View from Raven Road near Bodega Avenue looking southeast along the driveway towards the project site.
V. ISSUES RAISED BY THE PUBLIC OR AGENCIES

Agency Referral

A referral packet was circulated to inform and solicit comments from selected relevant local and state agencies and to special districts and special interest groups that were anticipated to take interest in the project. As of August 7, 2019, the project planner has received responses to the project referral from:

- Sonoma County Fire and Emergency Services
- Sonoma County Department of Transportation & Public Works
- PRMD Project Review Health Specialist
- PRMD Natural Resources Geologist
- PRMD Grading and Stormwater
- Sonoma County Environmental Health
- Northwest Information Center of the California Historical Resources Information System
- California Department of Fish and Wildlife

The referral responses included several requests for further information and included recommended draft use permit conditions of approval.

Tribal Consultation Under AB52

Referrals were sent to the following Tribes on October 4, 2017:

- Cloverdale Rancheria of Pomo Indians
- Dry Creek Rancheria Band of Pomo Indians
- Lytton Rancheria of California
- Kashia Poms Stewarts Point Rancheria
- Federated Indians of Graton Rancheria
- Middletown Rancheria Band of Pomo Indians
- Mishewal Wappo Tribe of Alexander Valley
- Torres Martinez Desert Cahuilla Indians

The request for consultation period ended November 3, 2017, with no Native American Tribes having requested consultation for the project.

Public Comments

A neighborhood notification was distributed to residents within 300 feet of the subject property line on December 4, 2017. Public comments on the proposed project have been received, which were subsequently registered to the project file. Issues raised as areas of potential environmental concern include: groundwater use and quality, odor, safety, traffic, and preservation of rural agricultural character and structures. These comments were not in response to a formal public review period or County action.
VI. OTHER RELATED PROJECTS

Six other applicants have applied for cannabis cultivation projects in the unincorporated western Petaluma area (about a 5-mile radius from the project site), ranging in size from 500 square feet to 1 acre. One of these, a Zoning Permit for a 500-square foot indoor cultivation operation, has been issued and is operational. One Use Permit for a combined acre (indoor, outdoor, and mixed light) is in Approved Condition Compliance, but not yet operating. Three of these are working through the County cannabis permit program. One has an incomplete application, which is not currently being processed. No other proposed discretionary projects were identified within the vicinity.

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 incrementally add 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 will reduce the impact to a less than significant level.

**Potentially Significant Impact:** The project would have the impact described, and the impact could be significant. The impact cannot be reduced to less than significant by incorporating mitigation measures. An environmental impact report must be prepared for this project.

Each question was answered by evaluating the project as proposed, that is, without considering the effect of any added mitigation measures. The Initial Study includes a discussion of the potential impacts and identifies mitigation measures to substantially reduce those impacts to a level of 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.

The applicant and operators for TRV Corp have 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. However, cannabis permits require renewal and are not transferrable with the sale of the land like other Conditional Use Permits.
1. **AESTHETICS:**

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

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

Comment:
The Sonoma County General Plan does not explicitly identify scenic vistas, but does divide the scenic resources of Sonoma County into three categories: Community Separators, Scenic Landscape Units, and Scenic Highway Corridors. The project site is not located within an area designated as a Community Separator or Scenic Landscape Unit. The project site is, however, located off of Bodega Avenue, which is designated as a scenic corridor. Scenic corridors have a maximum setback of 200 feet from the roadway centerline for certain structure and activities. The project site is set back from Bodega Avenue by approximately 900 feet (700 feet beyond the 200 foot setback), and views from Bodega Avenue would be substantially screened by existing trees, existing single-family homes, and accessory agricultural structures (barn, sheds) (Figures 2 and 5). The project would include additional landscaping to screen the improvements at the project site, including trees planted with the intent of forming a relatively dense hedge for aesthetic screening around the proposed greenhouse. The viewshed of the project area as seen from the Bodega Avenue scenic corridor would not substantially change as a result of the project.

**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 adjacent to or in the vicinity of an officially designated state scenic highway (Caltrans 2018).

**Significance Level:** No Impact

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

Comment:
The project site is located off Bodega Avenue within a rural non-urbanized portion of Sonoma County. The existing visual character of the site and surrounding area is rural agricultural, with some larger-scale commercial agricultural operations and rural residential and accessory agricultural uses. The residential uses on the project site, and within the immediate vicinity of the project site, already have exterior lighting; however, nighttime lighting in the area is minimal. The project site is set back from Bodega Avenue by approximately 900 feet (Figure 2), and views from Bodega Avenue are substantially screened by existing trees, single-family homes, and agricultural structures (Figure 5). The proposed greenhouse would be made of polycarbonate materials similar to other agricultural structures, and would be approximately 24 feet in height, which is comparable to a 2-story house and well within the allowable height limit for agricultural buildings. The project would be
constructed among existing accessory agricultural structures located on the project parcel, such as barns, sheds, and a chicken coop. Installation of the cultivation facility would be compatible with the existing agricultural character of the site.

The most visible change would be the proposed security fence, required by County code. Existing fencing along the property would be utilized, with additional no climb chain link security fencing to be installed around the greenhouse. The project would include landscaping to screen the improvements at the project site, including trees planted with the intent of forming a relatively dense hedge for aesthetic screening. Although the new fencing would be visible in the immediate vicinity of the project site on Raven Road and Bodega Avenue, the proposed landscaping would substantially soften the visual appearance.

Construction activities would result in temporary changes to the visual character of the project area for approximately six months. This would include the presence of construction equipment, trucks, and staging areas as seen from Bodega Avenue. Because of the short duration of construction activities (approximately six months), and the degree of existing visual screening provided by trees and intervening structures, the temporary changes to visual character during construction would be less than significant.

Utilizing the County’s Visual Assessment Guidelines, the site sensitivity of the project site would be High, which is a category applied to rural land use designations with an additional scenic resources protection designation, such as a Scenic Corridor. Although the portion of the parcel containing the access road is within a Scenic Corridor, the parcel is a flag lot, and the project footprint is set back about 900 feet behind structures and vegetation on intervening parcels (Figures 1 and 2). Therefore, the visual dominance would be Subordinate, applied when proposed project elements would be minimally visible from public view; the project can be seen but does not attract attention, and generally repeats the form, line, color, texture, and night lighting of its surroundings.

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>Visual Dominance</th>
</tr>
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<tbody>
<tr>
<td>Maximum</td>
<td>Dominant</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
</tr>
<tr>
<td>High</td>
<td>Significant</td>
</tr>
<tr>
<td>Moderate</td>
<td>Significant</td>
</tr>
<tr>
<td>Low</td>
<td>Less than significant</td>
</tr>
</tbody>
</table>

Based on the project site’s High visual sensitivity and the proposed project’s Subordinate 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:**
The residential uses on the project site, and within the immediate vicinity of the project site, already have exterior lighting; however, nighttime lighting in the area is minimal. The project would include new exterior security lighting on the façade of the proposed greenhouse, as well as the use of grow lights inside the greenhouse. Proposed security lighting at all locations would be fully shielded, downward casting, and motion sensor-controlled to remain off unless needed. Nighttime lighting spillage from security lighting would be minimal. Therefore, the new exterior lighting would not create a new source of substantial light or glare.

The proposed greenhouse would include large, opaque, electronically-controlled curtains designed to fully contain the interior lights such that no light would escape between sunset and sunrise and no light would be visible from neighboring properties. Therefore, the proposed lighting within the greenhouse would not create a new source of substantial light.

In addition, the polycarbonate greenhouse would be less reflective and result in minimal glare when compared to glass materials, limiting the potential for daytime glare associated with sunlight striking the roof.

The project would be required to comply with the following development standard for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(f)(19):

> **Lighting.** All lighting shall 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.

Design review, required as a standard use permit condition of approval, includes review of all proposed lighting to ensure such lighting would be compatible with County requirements and with the surrounding area.

Nighttime construction work would not be required for the project. Therefore, no exterior lighting would be required during construction.

**Significance Level:** Less than Significant Impact

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**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 Department 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:
According to the California Department of Conservation’s Sonoma County Important Farmland Map, the majority of the project site is designated as Other Land, and a small portion is designated as Farmland of Local Importance (DOC 2016). Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use.

Significance Level: No Impact

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

Comment:
The project site is in the Land Extensive Agriculture zoning district, which allows up to one acre of commercial cannabis cultivation, plus ancillary on-site processing, with a Use Permit. The parcel is not subject to a Williamson Act Land Conservation Act Contract. Therefore, the project would not conflict with the existing zoning for agricultural use, or with a Williamson Act Contract.

Significance Level: No Impact

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), 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, and no commercial timberland is present. Therefore, the project would not conflict with or cause rezoning of forest land or timberland zoned Timberland Production.

Significance Level: No Impact

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

Comment:
The project would not be located on land utilized or zoned for forest land, timberland, or timber production. Therefore, the project would not result in the loss or conversion of forest land.

Significance Level: No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use?

Comment:
Livestock grazing occurs and will continue on approximately 4 acres of land, about 53 percent of the total land acreage. No housing or residential units would be constructed as part of the project, which could result in an incompatible future use due to nuisance complaints. The existing residential development will remain, but not be expanded. The project will result in permanent loss of approximately 0.5 acre of potential farmland, within the footprint of the cultivation building, parking area, and access improvements, which equates to about 6 percent of the total land acreage. Although the proposed greenhouse is intended for cannabis cultivation, greenhouses are generally agricultural in nature, and could be utilized for and be compatible with a future traditional agricultural use on the parcel. Therefore, the project would not convert a significant amount of potential farmland to non-agricultural use.

Significance Level: Less than Significant

3. AIR QUALITY:

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

Would the project:

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

Comment:
The project is located within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) and within the San Francisco Bay Area Air Basin. According to California standards, the San Francisco Bay Area Air Basin is currently designated as a nonattainment area for particulate matter 2.5 microns or less in diameter (PM$_{2.5}$), particulate matter 10 microns or less in diameter (PM$_{10}$), and ozone. Under national standards, the San Francisco Bay Area Air Basin is currently designated as nonattainment for PM$_{2.5}$ and 8-hour ozone. The Air Basin is in attainment (or unclassified) for all other air pollutants (BAAQMD 2018).

The BAAQMD’s 2017 Clean Air Plan (BAAQMD 2017a) is the applicable air quality plan for the San Francisco Bay Area Air Basin. The 2017 Clean Air Plan contains 85 individual control measures in nine economic sectors: stationary (industrial) sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants. Many of these control measures require action on the part of the BAAQMD, the California Air Resources Board (CARB), or local communities, and are not directly related to the actions undertaken for an individual development project. The project would not prevent the BAAQMD from implementing these actions and none apply directly to the project. The project size would be well below emission threshold screening levels for ozone precursors (see discussion in 3.b below). As a result, the project would not conflict with or obstruct implementation of the 2017 Clean Air Plan.
Significance Level: No Impact

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

Comment:
As summarized in Item 3.a above, the San Francisco Bay Area Air Basin is currently designated as a nonattainment area for PM$_{2.5}$, PM$_{10}$, and ozone under State standards. Under national standards, the San Francisco Bay Area Air Basin is currently designated as nonattainment for PM$_{2.5}$ and 8-hour ozone. The Air Basin is in attainment (or unclassified) for all other air pollutants (BAAQMD 2018). Based on the current Air Basin designations, the non-attainment pollutants of concern are ozone, PM$_{10}$, and PM$_{2.5}$.

Construction
The BAAQMD’s 2017 CEQA Air Quality Guidelines provides screening criteria for determining if a project could result in significant construction-phase impacts from criteria pollutants and precursors (BAAQMD 2017b). Criteria air pollutants and precursors include reactive organic gases, nitrogen oxides, PM$_{10}$, PM$_{2.5}$, and carbon monoxide. In accordance with the BAAQMD’s 2017 CEQA Air Quality Guidelines, construction activities would have a less than significant impact to air quality if the following screening criteria are met:

1. The project size is below the applicable screening level size shown in Table 3-1 of the BAAQMD 2017 CEQA Air Quality Guidelines;
2. All Basic Construction Mitigation Measures are included in the project design and implemented during construction; and
3. Construction-related activities would not include any of the following:
   • Demolition activities inconsistent with District Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing;
   • Simultaneous occurrence of more than two construction phases;
   • Simultaneous construction of more than one land use type;
   • Extensive site preparation; or
   • Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

Cannabis cultivation is not listed as a land use type in the BAAQMD screening criteria; however, a general comparison can be made to a similar land use. The applicable construction-related screening size for a general light industrial land use is 259,000 square feet of facilities and/or a project construction site that is 11 acres or greater in size. The project would include approximately 14,000 square feet of facilities on an approximately one acre portion of a 7.59-acre parcel. The project size would be considerably less than the BAAQMD’s construction-related criteria pollutant and precursor screening level. Following use of the screening criteria found in the BAAQMD Air Quality Guidelines, a detailed air quality study for construction related air emissions is not required for the project.

The project would not be anticipated to encounter asbestos-containing materials during construction (one barn would be demolished; no structures would be repurposed), would not involve the simultaneous occurrence of more than two construction phases, or construction of more than one land-use type. Construction would not involve extensive site preparation or material transport as balanced cut and fill would be used with a small amount of engineered fill for spread
footings and slab-on-grade support. The project would not have a cumulative effect on ozone because it would not exceed the BAAQMD’s thresholds of significance for ozone precursors during construction. The project would result in a short-term increase in fugitive dust emissions during construction (which would include PM$_{2.5}$ and PM$_{10}$). With implementation of the BAAQMD’s recommended basic construction measures identified in Mitigation Measure AIR-1, the impact of construction emissions would be less than significant.

**Operation**

The applicable BAAQMD operational screening size for a light industrial facility is 541,000 square feet of facility, or a site that is 72 acres in size, or a project that includes 1,249 employees. The project would include 14,000 square feet of cultivation facilities on an approximately one acre portion of a 7.59-acre site, and would include approximately six full time employees. The project would be less than the BAAQMD’s operational criteria pollutant and precursor screening level, and would not result in substantial long-term operational emissions of criteria air pollutants. Therefore, the project’s contribution to a cumulative nonattainment criteria pollutant impact would be less than significant.

The BAAQMD screening analysis for a carbon monoxide hotspot is whether a project would increase traffic volumes at a nearby intersection to more than 44,000 vehicles per hour. Traffic counts available for Bodega Avenue at Corte Allegra, located approximately 1.5 miles east of the project site, indicate that Bodega Avenue supported 5,060 average daily trips (Sonoma 2018), which would equate to an hourly vehicle count far below the screening level. The project would conservatively add seven trips during a peak hour. Therefore, no carbon monoxide hotspot exists in the project area.

The project would have no long-term effect on PM$_{2.5}$ and PM$_{10}$, as ground surfaces would be paved, landscaped or otherwise treated to stabilize bare soils after construction, and dust generation would be minimal. The project would generate ozone precursors from new vehicle trips, but would not have a cumulative effect on ozone as the project would not exceed the BAAQMD’s thresholds of significance for ozone precursors.

**Significance Level:** Less than Significant with Mitigation Incorporated

**Mitigation:**

**Mitigation Measure AIR-1 Construction Dust and Air Quality Control:**

The following BAAQMD recommended basic construction measures and air quality control measures shall be included in the construction contract specifications for the project and implemented during construction:

a. A Construction Coordinator shall be designated by the project applicant, and a sign shall be posted on the site including the Coordinator’s 24-hour phone number for public contact regarding dust, trackout, and air quality complaints. The Coordinator shall respond and take corrective action within 48 hours. The Coordinator shall report all complaints and their resolutions to Permit Sonoma staff.

b. Water or alternative dust control method shall be sprayed to control dust on construction areas, soil stockpiles, and staging areas during construction as directed by the County.
c. Trucks hauling soil, sand, and other loose materials over public roads shall cover the loads, or shall keep the loads at least two feet below the level of the sides of the container, or shall wet the load sufficiently to prevent dust emissions.

d. Vehicle speeds on unpaved areas shall be limited to 15 miles per hour.

e. Final surfacing (i.e., pavement or concrete, gravel, landscaping) shall be completed as soon as possible after earthwork is finished, unless seeding or soil binders are used.

f. Idling time of diesel-powered construction equipment shall be limited to five minutes. Signs shall be posted reminding workers of this idling restriction at all access points and equipment staging areas during construction of the proposed project.

g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications and shall have a CARB-certified visible emissions evaluator check equipment prior to use at the site.

h. Trackout shall not be allowed at any active exit from the project site onto an adjacent paved public roadway or shoulder of a paved public roadway that exceeds cumulative 25 linear feet and creates fugitive dust visible emissions without cleaning up such trackout within 4 hours of when the Construction Coordinator identifies such excessive trackout, and shall not allow more than 1 quart of trackout to remain on the adjacent paved public roadway or the paved shoulder of the paved public roadway at the end of any workday.

i. Visible emissions of fugitive dust shall not be allowed during cleanup of any trackout that exceeds 20 percent opacity as determined by the Environmental Protection Agency in Method 203B - Opacity Determination for Time-Exception Regulations (August 2017). Trackout is defined by BAAQMD in Regulation 6, Rule 6: Prohibition of Trackout (August 2018) as any sand, soil, dirt, bulk materials or other solid particles from a site that adhere to or agglomerate on the exterior surfaces of vehicles (including tires), and subsequently fall or are dislodged onto a paved public roadway or the paved shoulder of a paved public roadway on the path that vehicles follow at any exit and extending 50 feet out onto the paved public roadway beyond the boundary of the site. Material that has collected on the roadway from erosion is not trackout.

Mitigation Monitoring:

Mitigation Monitoring AIR-1 Construction Dust and Air Quality Control: Permit Sonoma staff shall verify that the AIR-1 measures are included on all site alteration, grading, building or improvement plans prior to issuance of grading or building permits. The applicant shall submit documentation to Permit Sonoma staff that a Construction Coordinator has been designated and that appropriate signage has been posted including the Coordinator’s phone number. Documentation may include photographic evidence or a site inspection, at the discretion of Permit Sonoma staff.

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 predominantly rural area, away from institutional receptors (the nearest known is Two Rock Elementary on Spring Hill Road about 1.8 miles to the west). Sensitive receptors in the project area include off-site residences located approximately 300 and 450 feet north of the project site along Raven Road.
Given the short construction period (less than 6 months) and the implementation of dust and air quality control measures described Mitigation Measure AIR-1, the impact of construction-related emissions on sensitive receptors would be less than significant. Such measures include minimizing idling times for trucks and equipment, ensuring that construction equipment is maintained in accordance with manufacturer’s specifications, watering exposed surfaces, and other measures.

The project would not generate substantial amounts of criteria pollutants following construction (see Item 3.b above). The project would include backup power (battery or diesel powered generator), and the installation of a diesel powered generator would require an Authority to Construct/Permit to Operate from the BAAQMD. The BAAQMD would require any diesel generator to be either EPA or CARB certified and achieve emission standards for emergency standby sources prior to authorizing installation. A backup generator would only be used when power is lost and when the generator is exercised for maintenance purposes. The operational impact on sensitive receptors to substantial pollutant concentrations would be less than significant.

**Mitigation:**
Implement Mitigation Measure AIR-1 Construction Dust and Air Quality Control

**Mitigation Monitoring:**
See Mitigation Monitoring AIR-1 Construction Dust and Air Quality Control

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

**Comment:**
**Construction Odors**
Construction equipment may generate odors during project construction; however, such activities would be intermittent and temporary and odors would dissipate rapidly from the source. In addition, implementation of Mitigation Measure AIR-1 would reduce construction vehicle emissions which could contribute to odor and would not affect a substantial number of people. Therefore, the construction-related odor impact would be less than significant.

**Greenhouse and Cultivation Odors**
Cannabis cultivation facilities are not listed as an odor generating land use in the BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017b); however, cannabis odors can occur from such facilities if not properly managed. Outdoor cultivation operations typically generate the strongest cannabis odors. The project would not include outdoor cultivation; all cultivation would occur within the proposed greenhouse. The project would be required to comply with the following Operating Standard for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(g)(2):

> “All indoor, greenhouse and mixed light cultivation operations and any drying, aging, trimming and packing facilities shall be equipped with odor control filtration and ventilation system(s) to control odors humidity, and mold.”

As described in the Project Description, odor controls would be in place for all cultivation, propagation, and processing areas. Methods would include misting vapor units, automatic pneumatics control systems, and carbon filtration technology. Implementation of odor controls and
adherence to the County’s Zoning Code is mandatory. When properly functioning within a sealed structure, the proposed odor control system would contain all cannabis odors inside the greenhouse and ensure that no odor is detectible at any property boundary. Mitigation Measure AIR-2 requires maintenance and monitoring of odor control equipment to ensure odor release from structures would be reduced to a less than significant level.

**Significance Level:** Less than Significant with Mitigation Incorporated

**Mitigation:**

**Mitigation Measure AIR-2 Operational Odor Control for Structures**

The cannabis cultivation greenhouse shall install and maintain an odor control air filtration and ventilation system that controls humidity and mold and ensure there would be no off-site odor from structures. Daily inspections shall be performed. Inspections shall include verifying that all filtration equipment is functioning properly, checking that filters have been replaced on schedule, and shall include a walking tour through the interior and around the exterior of each cannabis-containing facility to document any noticeable odor.

**Mitigation Monitoring:**

**Mitigation Monitoring AIR-2 Operational Odor Control for Structures**

Permit Sonoma staff shall ensure that the odor control filtration and ventilation system(s) are included on all building and/or improvement plans, prior to issuance of building permits. Odor monitoring reports shall be submitted annually to the County by January 31 of each year. Daily logs shall be made available to Permit Sonoma staff upon request throughout the year in response to any odor concerns that may arise.

4. **BIOLOGICAL RESOURCES:**

Would the project:

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

**Regulatory Framework**

**Special-Status Species**

Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed and proposed species. In addition, California Department of Fish and Wildlife (CDFW) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, U.S. Fish and Wildlife Service (USFWS) Birds of Conservation Concern, and CDFW special-status invertebrates, are all considered special-status species. Although CDFW Species of Special Concern generally have no special legal status, they are given special consideration under CEQA. In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty
Act of 1918. Plant species on California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants with California Rare Plant Ranks (Rank) of 1, 2 and 4 are also considered special-status plant species and must be considered under CEQA. Bat species designated as “High Priority” by the Western Bat Working Group (WBWG) qualify for legal protection under Section 15380(d) of the CEQA Guidelines. Species designated “High Priority” are defined as “imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.”

Endangered Species Act

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

Critical Habitat

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

Comment:
A Biological Resources Report was prepared for the project site to identify special-status plant and wildlife species and sensitive habitats (including wetlands) that have the potential to occur on or in the vicinity of the project site (Sol Ecology, June 20, 2019). The assessment included literature and database searches as well as site surveys to determine what species might have potential to be present on the project site. The information and data collected for the assessment have been used
as the basis of this biological resources analysis.

**Special-Status Plant Species**
A total of 64 special-status plant species have been documented within a 9-quad search for the project site. Of the 64 special-status species, five (5) were determined to have the potential to occur within the proposed project site:

1. Bent-flowered fiddleneck (*Amsinckia lunaris*), Rank 1B.2
2. Congested-headed hayfield tarplant (*Hemizonia congesta ssp. congesta*), Rank 1B.2
3. Bristly leptosiphon (*Leptosiphon acicularis*), Rank 4
4. Marsh microseris (*Microseris paludosa*), Rank 1B.2
5. Two-fork clover (*Trifolium amoenum*), Federal Endangered, Rank 1B.1

Protocol-level floristic surveys were performed within the blooming period of these special-status plant species in March, April, and June of 2019. No special-status plant species were observed during the surveys. The study incorporated a visit to a nearby reference site and noted that weather conditions were average, and no evidence of disease, drought, predation herbivory, or fire was observed that could have resulted in inaccurate conclusions. Based on the findings from the protocol-level surveys, no special-status plants are present within the adjacent to the project area and no impact would result from project implementation.

**Special Status Amphibian Species**
The site is not located within designated critical habitat for California red-legged frog (CRLF) (*Rana draytonii*). No evidence of upland habitat is present on the project site. The only suitable aquatic habitat in the vicinity of the project site for CRLF, as well as Pacific pond turtle (PPT) (*Actinemys marmorata*), is a pond more than 400 feet away from the project site. Review of historical aerial photographs dating back to 1993 indicate that this pond is perennial and does not go dry. A drainage feature located approximately 50 feet to the southwest of the project area does not provide suitable aquatic habitat given its ephemeral nature (receiving waters only when the upstream pond is spilling) nor does it have indicators of ponding, even for a short duration, which would be capable of supporting CRLF or PPT. Riparian habitat located along this feature is sparse, with limited understory and no pool or seep habitat. The channel has a bed and bank, but no mean water line is present and at times the channel disappears completely. The study determined that based on these criteria, the nearby drainage channel does not provide suitable aquatic habitat. CRLF and PPT may disperse across the project site and/or through adjacent lands surrounding the site during the winter-spring wet season, but are otherwise not likely to be present.

The project site is not located within critical habitat or the regulatory Santa Rosa Plain for California tiger salamander (CTS) (*Ambystoma californiense*), and there are no occurrences of CTS within 1.3 miles of the site. CTS requires two primary habitat components: aquatic breeding sites and upland terrestrial estivation or refuge sites. The project site is in proximity to a small stockpond that may provide suitable breeding habitat for CTS (though stockponds are not generally preferred habitat by the Sonoma County Distinct Population Segment). Burrow density on the project site is relatively low. Given the absence of preferred breeding habitat, lack of occurrences in the general vicinity, and the relatively low burrow densities on the project site, CTS is unlikely to occur.

In the event CRLF, PPT, or CTS are present in the nearby stockpond or if such species were to disperse onto the project site, implementation of Mitigation Measures BIO-1 through BIO-5 will
ensure no direct effects (mortality/take) would occur and thereby reduce impacts to a less than significant level.

**Special-Status Avian Species**

Birds and raptors are protected under the federal Migratory Bird Treaty Act (50 CFR 10.13), and their nests, eggs, and young are also protected under the California Fish and Wildlife Code (§3503, §3503.5, and §3513). In addition, raptors such as the white-tailed kite are "fully protected" under the Fish and Wildlife Code (§3511). No special status birds were observed during site surveys, and no burrows capable of supporting nesting or wintering of burrowing owl (*Athene cunicularia*) were observed on or adjacent to the project site. Suitable nesting habitat for white-tailed kite (*Elanus leucurus*) is present in trees immediately adjacent to the project site, and there is ample foraging habitat on and adjacent to the project site. Vegetation removal and ground disturbance may result in potentially adverse effects to nesting birds, if present. Mitigation Measure BIO-6 would reduce the impact to nesting birds to a less than significant level.

**Special-Status Bat Species**

Bats may roost in tree cavities or old structures, such as barns. A bat roost assessment and emergence and acoustic surveys were performed at the project site on May 23, 2019. No special status or common bats were detected during the May survey. However, two special-status bats, western red bat (*Lasiurus blossevillii*) and hoary bat (*Lasiurus cinereus*), may potentially roost in the foliage of a blue gum tree that is located on the project site that is scheduled for removal. Therefore, these two special-status bat species (or others) may be adversely affected as a result of tree removal, if present. Mitigation Measure BIO-7 would reduce any potential impact to special status bats to a less than significant level.

**Other Species**

No suitable stream or wetland habitat is present on or immediately adjacent to the project site that would support special status fish species, California freshwater shrimp, California giant salamander, red-bellied newt, foothill yellow-legged frog, willet, or long-billed curlew. The project site is not within the known range of some species, such as coast range newt and western spadefoot toad. No suitably sized burrows or denning habitat was observed on the project site for burrowing owl or American badger. Suitable roost habitats for most special-status bat species was not present, such as Townsend’s big-eared bat and pallid bat. None of these species are likely to be present, and therefore, potential impacts to these species would be less than significant.

**Light Pollution**

The proposed greenhouse would include large, opaque, electronically-controlled curtains designed to fully contain the interior lights such that no light would escape between sunset and sunrise. Proposed security lighting would be fully shielded, downward casting, and motion-sensor controlled to remain off unless needed. Therefore, the proposed project would not create a new source of substantial artificial light affecting wildlife and associated ecosystems.

**Significance Level:** Less than Significant with Mitigation Incorporated

**Mitigation**

**Mitigation Measure BIO-1 Environmental Awareness Training:** Environmental training shall be provided to all persons working on the project site prior to the initiation of project-related activities. Training materials and briefings shall include a description of all biological resources
that may be found on or in the vicinity of the project site, the laws and regulations that protect those resources, the consequences of non-compliance with laws and regulations, instructions for inspecting equipment each morning prior to activities, and a contact person in the event that protected biological resources are discovered on the site.

**Mitigation Measure BIO-2 Pre-Construction Surveys:** A pre-construction survey for CRLF and PPT (and other ground-dwelling species such as CTS, American badger and burrowing owl) shall be conducted within 48 hours prior to the start of ground disturbance activities. Examination of burrows, dense vegetation, and/or other refugia shall be the focus of the surveys. Surveys shall be conducted by a qualified biologist with experience surveying for these species. If CRLF (or any other special status species) are found, no work shall occur until the animal has left the project site. If the animal does not leave the area on its own, work shall remain halted and appropriate county, state and federal agencies contacted. If project activities are stopped for greater than 7 days, a follow-up pre-construction survey may be required within 48 hours prior to re-initiation of project activities, at the discretion of agency staff.

**Mitigation Measure BIO-3 Exclusion Fencing and Biological Monitoring:** Prior to the start of activities, exclusion fencing shall be installed around areas of construction or ground disturbance under the direction of the qualified biologist to prevent CRLF, PPT, and CTS from entering the construction area. The following design specifications shall be used for effective temporary exclusion fencing:

- Taut silt fencing extending at least 24 inches above ground;
- Buried a minimum of six inches below ground surface and constructed with a lip so that animals cannot scale and go over the barrier;
- No gaps or holes in the exclusion barrier except for access gates required for vehicular and pedestrian traffic or as designed for one-way exit points (e.g., ramps or doors) to allow animals to move out of the construction site but not back in;
- Exit points no more than 200 feet apart and flush to the ground to prevent species from accessing the construction site;
- Redirection points at access gates at no greater than 100-foot intervals (for example, at least 5 feet of fencing perpendicular to the exclusion barrier) to redirect species on the outside of the barrier away from entrances into the barrier.

A qualified biologist shall be on site during all initial ground disturbance activities to inspect fencing and halt work if any sensitive wildlife species is found on the site.

**Mitigation Measure BIO-4 Standard Construction Measures for Protecting Biological Resources:** The following standard construction measures shall be implemented during construction of the project:

- No work shall take place during rain events when there is 40% chance or higher potential for precipitation to occur. In addition, no work shall occur for 48 hours following rain events in which 0.25 inch of rain accumulated within 24 hours to avoid animals that may be dispersing.
• No work shall take place within 30 minutes before sunset to 30 minutes after sunrise to avoid animals that may disperse or forage during the night.

• Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic monofilament netting (erosion control matting), rolled erosion control products, or similar material shall not be used. Geotextiles, fiber rolls, and other erosion controls measures shall be made of loose-weave mesh, such as jute, hemp, coconut fiber, or other products without welded weaves.

Mitigation Measure BIO-5 Prevent Disturbance to Nesting Birds: To the extent possible, all construction activities should be performed outside the nesting season (between September 1 and February 1). If work must be performed during the nesting season, a pre-construction nesting bird survey shall be performed in all areas within 500 feet of project-related activities no more than 14 days prior to ground disturbance. If nests are found, an appropriately sized no-disturbance buffer shall be placed around the nest at the direction of a qualified biologist conducting the survey. This buffer may be modified depending on the species, nest location, and existing visual buffers, but typically would entail a minimum of 500 feet for raptor species and 300 feet for other migratory species. Buffers shall remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated. If initial ground disturbance is delayed or there is a break in project activities of more than 14 days within the bird-nesting season, then a follow-up nesting bird survey shall be performed to ensure no nests have been established in the interim.

Mitigation Measure BIO-6 Protect Bat Species: To the extent possible, tree removal will be performed outside the summer (maternity) months (between September 1 to April 15) to avoid the period when bats may be present. If not possible, a follow-up acoustic survey shall be performed to determine if any bats, including any solitary species, are present. Surveys shall be conducted immediately prior to construction (within 1 to 2 days) of all structures and trees within 100 feet of the construction site. If present, the roost shall be avoided until after September 1 to ensure no adverse effects to maternity bat roosts. Tree removal outside the maternity season shall be performed using a two-step tree removal process which includes allowing any felled trees or tree limbs to be left overnight prior to removal from the site or on-site chipping to allow any bats to exit the roost. For the single blue gum species, the tree shall be pruned from the bottom up to 30 feet on day 1, followed by complete removal on day 2 to allow any bats to leave the site prior to felling.

Mitigation Monitoring

Mitigation Monitoring (BIO-1 through BIO-6): Prior to issuance of grading or building permits, Permit Sonoma staff shall ensure that minimization measures are listed on all site alteration, grading, building or improvement plans. Prior to construction and through completion of initial site disturbance, Permit Sonoma staff shall verify that all surveys have been conducted according to applicable protocols and shall review the results of all pre-construction surveys and any measures recommended by the biologist to avoid sensitive habitat or species and ensure compliance.

Mitigation Measure BIO-7 Standard Operational Measures for Protecting Biological Resources: Following construction, the following standard operational measures shall be implemented as part of normal operations and maintenance of the project site:
Nighttime (security) lighting shall be directed downward away from surrounding habitats to avoid disrupting animals that may be dispersing.

Mowing shall not occur at night or when a greater than 40% chance of rain is forecast. Light mowing equipment shall be used that would not crush burrows or impact the ground. Mowing shall be completed in rows and not in a circular pattern.

A spill prevention plan shall be implemented to ensure practices avoid spills or leakage of any other hazardous materials, such as petroleum.

Speed limits of 10 mph or less shall be maintained on all roads within the property.

**Mitigation Monitoring**

**Mitigation Monitoring BIO-7:** Prior to issuance of grading or building permits, Permit Sonoma staff shall ensure that minimization measures are listed on all site alteration, grading, building or improvement plans. Applicant shall ensure that these measures are communicated to and implemented by all employees.

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

Comment:
One unnamed ephemeral drainage channel and associated willow scrub riparian habitat occurs along the western boundary approximately 50 feet southwest of the proposed improvements. Additionally, an unnamed ephemeral drainage channel bisects Raven Road near Bodega Avenue via a culvert. The project would not require work within or immediately adjacent to either drainage channel. The project includes a 50-foot setback from the edge of the nearest unnamed ephemeral drainage channel in accordance with the State Water Quality Control Board General Order for Cannabis Activities. No other sensitive vegetation communities are present on the project site. Therefore, the project would not affect riparian habitat or any other sensitive natural community.

Significance Level: Less than Significant Impact

c) **Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

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

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

Comment:
A Biological Resources Report was prepared for the project site to identify wetlands that have the potential to occur on or in the vicinity of the project site (Sol Ecology, June 20, 2019). The project site was surveyed to identify if any wetlands and waters potentially subject to jurisdiction by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), or CDFW are present. The wetland assessment was based on the presence of wetland plant indicators, hydrology, and wetland soils. The assessment did not identify any wetlands on the project site. Therefore, the project would have no impact on wetlands.

Significance Level: No 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:
CRLF, CTS, and PPT may potentially disperse across the project site during seasonal dispersal events (typically at night or during rain events in the late spring and mid to late fall). Based on ample accessible grassland habitat surrounding the site and maintenance of a 50-foot setback from the nearby drainage, the proposed project would not result in any permanent barrier to dispersing animals from the nearby stockpond. The project is not likely to result in substantial interference due to a lack of any direct connection between suitable aquatic habitats and because more suitable upland and dispersal habitat is available in the surrounding area. Trees and grassland within the project area could also be used as foraging and nesting habitat for passerines and raptors protected under the MBTA and the California Fish and Wildlife Code (see Item 4.a). If such species were present at the project site, vegetation removal and/or construction noise would have the potential to impact nesting. Implementation of Mitigation Measures BIO-1 through BIO-7 would reduce the potential impacts to a less than significant level.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:
Implement Mitigation Measure BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6 and BIO-7
Mitigation Monitoring

See Mitigation Monitoring BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6 and BIO-7

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

Comment:
The project would not remove trees that are protected by the Tree Protection Ordinance listed in the Sonoma County Zoning Code (Sec. 26-88-010(m)). The project site is not located in an area with a special resource protection designation (e.g., VOH- Valley Oak Habitat, RC- Riparian Corridor). Therefore, the project would not conflict with any local resource protection policies or ordinances. No impact would occur.

Significance Level: No Impact

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

Comment:
Habitat conservation plans and natural community conservation plans are site-specific plans to address effects on sensitive species of plants and animals. There are no adopted habitat conservation plans or natural community conservation plans covering the project area, nor is the project site located in the Santa Rosa Plain. Therefore, the proposed project would not be subject to any habitat conservation plan or natural community conservation plan and would not conflict with any such plans.

Significance Level: No Impact

5. CULTURAL RESOURCES:

Would the project:

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

Comments:
A Cultural Resources Study was prepared for the project site in June 2018 by the Anthropological Studies Center (ASC) at Sonoma State University (ASC 2018). As part of the records search, the California Register of Historical Resources and the National Register of Historic Places were reviewed to determine if any known historic resources are present within the project area. The records search identified no previously recorded built environment cultural resources within the project area (ASC 2018).

The project would be located on a site with several existing built structures, including a single-family home, garage, barns, a chicken coop, several sheds, and three shipping containers. It is anticipated that the three shipping containers, which combined are approximately 750 square feet in size, would be removed as part of the project. The shipping containers to be removed from the site
would not be eligible for listing in the national, state or local historic inventories, as they do not meet any of the context types required for establishment of historic significance.

Therefore, as no identified built environmental historical resources are located within the project area, project would have no impact on such a resource. Prehistoric and historic-period archaeological resources are evaluated in 5b below.

**Significance Level:** No Impact

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

**Comment:**
On October 4, 2017, Permit Sonoma staff referred the project application to Native American Tribes within Sonoma County to request consultation under Assembly Bill-52. The request for consultation period ended November 3, 2017. No Native American Tribes requested consultation for the project.

A Cultural Resources Study was conducted for the project site (ASC 2018). The study assessed the potential for surficial and/or buried archaeological resources in the project area through the completion of the following:

- Records and literature search at the Northwest Information Center (NWIC) of the California Historical Resources Information Center (CHRIS);
- Further literature review of publications, files, and maps for ethnographic, historic-era, and prehistoric resources and background information;
- Communication with the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File and contact information for the appropriate tribal communities;
- Contact with the appropriate local Native American Tribes; and
- Pedestrian archaeological survey of the project area.

The records and literature search found no previously recorded archaeological resources on the project site, within the project-related area of potential effect, or within a 0.25-mile search radius. A pedestrian archaeological survey of the project site also identified no archaeological resources. The NAHC reported their sacred land files do not indicate the presence of Native American cultural resources in the project area, and no information has been received from Native American individuals contacted.

The study concluded that there is a moderate sensitivity for buried prehistoric archaeological resources, and a low potential for historic-era archaeological resources at the project site. Therefore, although no known archaeological resources were identified within the project area, the potential exists for encountering previously undiscovered archaeological resources during project construction.

Implementation of Mitigation Measure CUL-1 would reduce the potential impact by outlining procedures to be taken in the event of inadvertent discovery.

**Significance Level:** Less than Significant with Mitigation Incorporated
Mitigation

Mitigation Measure CUL-1 Archaeological Monitoring and Inadvertent Discovery Procedures:
A qualified Archaeological Monitor shall be present onsite during initial grading and ground disturbance activities, including any vegetation removal or grubbing. If archaeological materials are encountered during ground-disturbing activities, all work within 25 feet of a discovery shall be halted until an archaeologist assesses the find, consults with the appropriate individuals and agencies, and makes recommendations for the treatment of the discovery to protect the integrity of the resource and ensure that no additional resources are affected. Upon completion of the assessment, the archaeologist shall prepare a report to document the methods and results of the assessment. The report shall be submitted to Permit Sonoma and the NWIC upon completion of the project.

Additionally, all grading and building permit plans involving ground disturbing activities shall include the following notes that summarize the County’s standard “accidental discovery” condition of approval, which shall be implemented in the event of an inadvertent discovery:

“If prehistoric or historic archaeological resources, paleontological resources, or tribal cultural resources are encountered during ground-disturbing work, all work in the immediate vicinity shall be halted and the operator must immediately notify the Permit and Resource Management Department (PRMD) – Project Review staff of the find. The applicant shall be responsible for the cost to have a qualified paleontologist, archaeologist or tribal cultural resource specialist under contract to evaluate the find and make recommendations to protect the resource in a report to PRMD. Paleontological resources include fossils of animals, plants or other organisms. Prehistoric resources include humanly modified stone, shell, or bones, hearths, firepits, obsidian and chert flaked-stone tools (e.g., projectile points, knives, choppers), midden (culturally darkened soil containing heat-affected rock, artifacts, animal bone, or shellfish remains), stone milling equipment, such as mortars and pestles, and certain sites features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe. Historic resources include all by-products of human use greater than fifty (50) years of age including, backfilled privies, wells, and refuse pits; concrete, stone, or wood structural elements or foundations; and concentrations of metal, glass, and ceramic refuse.

If human remains are encountered, work in the immediate vicinity shall be halted and the operator shall notify PRMD and the Sonoma County Coroner immediately. At the same time, the operator shall be responsible for the cost to have a qualified archaeologist under contract to evaluate the discovery. If the human remains are determined to be of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification so that a Most Likely Descendant can be designated and the appropriate measures implemented in compliance with the California Government Code and Public Resources Code.”

Mitigation Monitoring

Mitigation Monitoring CUL-1 Archaeological Monitoring and Inadvertent Discovery Procedures: Prior to issuance of any grading or building permit(s), the applicant shall provide the County with documentation that a qualified archaeological monitor has been retained, and Permit Sonoma staff shall verify that the standard condition is printed on all building, grading, and improvement plans. Prior to granting of occupancy for the use, any assessment reports generated during monitoring shall be submitted to the County.
c) Disturb any human remains, including those interred outside of formal cemeteries?

Comment:
No human remains are known to exist within the project area. However, there is potential for earthwork and grading to result in the disturbance of previously unrecorded human remains, if present.

Implementation of Mitigation Measure CUL-1 would reduce the potential impact by outlining procedures to be taken in the event of inadvertent discovery of human remains.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation
Implement Mitigation Measure CUL-1 Archaeological Monitoring and Inadvertent Discovery Procedure

Mitigation Monitoring
Implement Mitigation Monitoring CUL-1 Archaeological Monitoring and Inadvertent Discovery Procedure

6. ENERGY:

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

Comment:
This analysis evaluates the use of energy resources (e.g., fuel and electricity) associated with construction activities, as well as operation and maintenance of the project. For construction, the analysis considers whether construction activities would use large amounts of fuels or energy, and whether they would be used in a wasteful manner. For energy used during operation and maintenance, the analysis identifies energy use that would occur with implementation of the project to determine whether large amounts would be used and whether they would be used in a wasteful manner.

Construction would require the use of fossil fuels (primarily gas, diesel, and motor oil) for excavation, grading, and vehicle travel. The precise amount of construction-related energy consumption is uncertain. However, construction would not require a large amount of fuel or energy usage because of the limited extent and nature of the proposed improvements and the minimal number of construction vehicles and equipment, worker trips, and truck trips that would be required for a project of this small scale (e.g., a 14,000 square foot building and parking constructed over a single 6-month construction season). Therefore, project construction would not encourage activities that would result in the use of large amounts of fuel and energy in a wasteful manner; the impact would be less than significant.

During the operational phase, energy would be consumed through daily use of the greenhouse lighting, heating, and cooling equipment. Project operation would require compliance with the following Operating Standard for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(g)(3):
Energy Use. Electrical power for indoor cultivation, mixed light operations, and processing
including 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. The use of generators for indoor and mixed light
cultivation is prohibited, except for portable temporary use in emergencies only.

The applicant has indicated that power for the operation will initially be purchased from a 100
percent renewable source (Sonoma Green Power / PG&E Green Power), with future plans to add
incremental solar generation capacity over time.

During the operational phase, energy would also be consumed through daily worker trips to the
facility, and commercial truck trips associated with delivery of supplies and distribution. However,
commute trips for a maximum of 6 employees and business deliveries would not be expected to
result in the use of large amounts of fuel and energy in a wasteful manner; the impact would be less
than significant.

While the long-term operation of the project would result in an increase in energy consumption
compared to existing conditions, due to the small scale of the project and the renewable energy
requirements, operation of the project would not use large amounts of energy and would not use it
in a wasteful manner.

Significance Level: Less than Significant Impact

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

Comment:
In 2003, the California Energy Commission (CEC), the California Power Authority, and the California
Public Utilities Commission (CPUC) jointly adopted an Energy Action Plan (EAP) that listed goals for
California's energy future and set forth a commitment to achieve these goals through specific
actions (CEC 2003). In 2005, the CEC and CPUC approved the EAP II, which identified further actions
to meet California's future energy needs, mainly focused on the energy and natural gas sectors (CEC
2005). Additionally, the CEC also prepared the State Alternative Fuels Plan in partnership with the
California Air Resources Board and in consultation with the other state, federal, and local agencies.
The alternative fuels plan presents strategies and actions California must take to increase the use of
alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the
economic benefits of in-state production (CEC 2007).

Construction and operation of the project would not conflict with or obstruct implementation of
either the EAP, EAP II, or the State Alternative Fuels Plan. Project construction would not require a
large amount of fuel or energy usage because of the limited extent and nature of the proposed
improvements and the minimal number of construction vehicles and equipment, worker trips, and
truck trips that would be required for a project of this small scale. As described under item 6a,
above, Project operation would require compliance with renewable energy requirements for
commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(g)(3).
No conflicts with a state or local plan for renewable energy or energy efficiency have been
identified.

Significance Level: No Impact
7. GEOLGY AND SOILS:

Existing geologic conditions that could affect new development are considered in this analysis. Impacts of the environment on the project are analyzed as a matter of County policy and not because such analysis is required by CEQA.

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 located within a designated Alquist-Priolo Earthquake Fault Zone or near a known active fault (Sonoma County 2008; Reese & Associates 2017).

Significance Level: No Impact

ii. Strong seismic ground shaking?

Comment:
All of Sonoma County is subject to seismic shaking that would result from earthquakes along the San Andreas, Healdsburg-Rodgers Creek, and other faults. By applying geotechnical evaluation techniques and appropriate engineering practices, potential injury and damage from seismic activity can be diminished, thereby exposing fewer people and less property to the effects of a major damaging earthquake. The design and construction of new structures are subject to engineering standards of the California Building Code, which take into account soil properties, seismic shaking and foundation type. Standard 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. This would include construction of the project in accordance with the project-level soil investigation report (Reese & Associates 2017) and any subsequent geotechnical report. All work would also 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. Therefore, the potential impact from strong seismic ground shaking would be less than significant.

Significance Level: Less than Significant Impact

iii. Seismic-related ground failure, including liquefaction?

Comment:
Strong ground shaking can result in liquefaction, which is the sudden loss of shear strength in saturated sandy material, resulting in ground failure. The project site is generally underlain by layers of natural sandy and clayey soils overlying highly weathered bedrock material, with silty sands extending from the surface to depths of about 2 to 3 feet (Reese & Associates 2017). The project
site is not located within a mapped liquefaction hazard area (Sonoma County 2008).

**Significance Level:** Less than Significant Impact

**iv. Landslides?**

**Comment:**
The project would be located on gently sloping ground surfaces (Reese & Associates 2017). The project site is not located within a deep-seated landslide hazard area (Sonoma County 2008), or on a mapped landslide complex or debris flow source area (USGS 1997; USGS 1998).

**Significance Level:** No Impact

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

**Comment:**
The project includes grading, cuts, and fills which require the issuance of a grading permit. Improper grading has the potential to result in soil erosion or loss of topsoil.

As discussed in Section 10 (Hydrology and Water Quality), erosion and sediment control provisions of the County Construction Grading and Drainage Ordinance (Zoning Code Chapter 11) and Storm Water Quality Ordinance (Zoning Code Chapter 11A) require submission of an Erosion and Sediment Control Plan and implementation of flow control best management practices to reduce runoff and require treatment of runoff from the two-year storm event. Required inspections by Permit Sonoma staff insure that all grading and erosion control measures are constructed according to the approved plans. These ordinance requirements and adopted best management practices are specifically designed to maintain potential water quantity impacts at a less than significant level during and post construction. Therefore, the potential soil erosion impact would be less than significant.

**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 upper silty sands on the project site are relatively weak and porous (Reese & Associates 2017). Weak, compressible soils can undergo strength loss and settlement when loaded in a saturated conditions. The project site is also subject to seismic shaking hazards as described in item 6.a.ii above. Standard conditions of approval require that building permits be obtained for all construction and that the project meet all seismic and soil test/compaction requirements. This would include construction of the project in accordance with the project-level soil investigation report (Reese & Associates 2017) and any subsequent geotechnical report, which would reduce the potential impact from the weak and porous soils to a less than significant level.

**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:
Upper silty sands at the project site exhibit a low expansion potential (Reese & Associates 2017). Layers of stiff sandy clay of moderate expansion potential and medium dense clayey sand were encountered underlying the topsoils extending to depths of 3 to 5 feet (Reese & Associates 2017). No substantial risks to life or property would be created from the soil expansion potential at the project site.

Significance Level: No 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 located in an area served by public sewer. The project would include an on-site pressure distribution septic system for waste water disposal. Preliminary documentation provided by the applicant indicates that the soils on the project site could adequately support a septic system for the operation (BC Engineering 2018). Given the use of existing domestic septic systems along Raven Road, and the soil review conducted by BC Engineering Group, site soils are anticipated to be capable of supporting the use of the proposed wastewater disposal system.

Significance Level: Less than Significant Impact

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

Comment:
Soil types within the project area include Holocene alluvium, Pleistocene to Holocene alluvial fan deposits, and pre-Quaternary deposits (ASC 2018). Older alluvium has yielded vertebrate fossils in Sonoma County and throughout California, and such older alluvium deposits may be located below the Holocene deposits in the project area. Although it is unlikely that project construction would impact paleontological resources, the potential exists for encountering previously undiscovered resources during project construction.

Implementation of Mitigation Measure CUL-1 would reduce the potential impact by outlining procedures to be taken in the event of inadvertent discovery.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:
Implement Mitigation Measure CUL-1 Archaeological Monitoring and Inadvertent Discovery Procedures.

Mitigation Monitoring:
See Mitigation Monitoring CUL-1 Archaeological Monitoring and Inadvertent Discovery Procedures.
8. **GREENHOUSE GAS EMISSIONS:**

Would the project:

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

**Comment:**

The Bay Area Air Quality Management District (BAAQMD) has adopted a significance threshold of 1,100 metric tons of CO₂e per year or compliance with a qualified GHG Reduction Strategy for operational impacts for land use projects. Emissions are caused by natural gas combustion, electricity use, on-road vehicles, water use, wine fermentation, carbon sequestration, and existing emissions. The BAAQMD does not include a threshold of significance for construction-related GHG emissions.

The project’s potential operational greenhouse gas emissions was estimated using the CalEEMod v. 2016.3.2 emissions model. Project-specific trip generation and application of the County’s renewable energy requirements (County of Sonoma’s Cannabis Ordinance 26-88-254 (g)(3)) were applied in the model. Modeling indicates that project operation would generate approximately 80 metric tons of carbon dioxide equivalent (MTCO₂e) emissions per year, which is less than the BAAQMD’s adopted greenhouse gas threshold of 1,100 MTCO₂e per year. Additionally, the project would be required to comply with the following operating standard for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(g)(3), which would further reduce operational GHG emissions:

> Electrical power for indoor cultivation, mixed light operations, and processing including 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. The use of generators for indoor and mixed light cultivation is prohibited, except for portable temporary use in emergencies only.

Project construction activities would result in a temporary source of additional greenhouse gas emissions (estimated to be less than 10 MTCO₂e), primarily in the form of carbon dioxide from exhaust emissions associated with haul trucks, construction worker commute vehicles, and construction equipment. No applicable standard or significance threshold has been established pertaining to construction-related greenhouse gas emissions. The BAAQMD CEQA Air Quality Guidelines do not include screening criteria for construction-related greenhouse gas emissions. Therefore, this review uses a qualitative approach to construction emissions in accordance with Section 15064.4(a)(2) of the CEQA Guidelines. Project construction activities are limited in scope and duration, consisting of improvements to develop 14,000 square feet of greenhouse space, associated site improvements, and driveway improvements. The project would not involve construction activities associated with higher-level greenhouse gas emissions such as use of a significant amount of heavy construction equipment, substantial earth-moving activities, or import/export of a significant amount of material. The addition of construction-related greenhouse gas emissions to the annualized operational emissions would remain substantially below the BAAQMD operational threshold.
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:
This analysis uses the California Air Resources Board (CARB) 2017 Climate Change Scoping Plan as the applicable greenhouse gas reduction strategy (CARB 2017). The Sonoma County Regional Climate Protection Authority’s Climate Action Plan (RCPA 2016), adopted in July 2016, is not used as a qualified greenhouse gas reduction strategy for CEQA purposes due to a court settlement.

The 2017 Climate Change Scoping Plan provides strategies for meeting the mid-term 2030 greenhouse gas reduction target set by Senate Bill (SB) 32. The 2017 Climate Change Scoping Plan also identifies how the State can substantially advance toward the 2050 greenhouse gas reduction target of Executive Order S-3-05, which consists of reducing greenhouse gas emissions to 80 percent below 1990 levels. The recommendations cover the key sectors, including: energy and industry; transportation; natural and working lands; waste management; and water. The recommended measures in the 2017 Scoping Plan are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of individual projects. Although project construction and operation may be affected by some of the State level regulations and policies that will be implemented, such as the Phase 2 heavy-duty truck greenhouse gas standards proposed to be implemented within the transportation sector, the project would not impede the State developing or implementing the greenhouse gas reduction measures identified in the Scoping Plan. Therefore, the project would not conflict with AB 32 or the 2017 Climate Change Scoping Plan.

The County’s Climate Change Action Resolution (May 8, 2018) resolved to reduce GHG emissions by 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050 and noted twenty strategies for reducing GHG emissions, including increasing carbon sequestration, increasing renewable energy use, and reducing emissions from the consumption of good and services. As noted above, the project would be required to comply with several renewable energy requirements for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(g)(3). By incorporating required renewable energy requirements, the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Significance Level: No Impact

9. HAZARDS AND HAZARDOUS MATERIALS:

Would the project:

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

Comment:
Small amounts of hazardous materials such as fuel, solvents, lubricants, paint and cleaning materials would be used during construction of the project. 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. Proper use of materials in accordance with local, State, and federal requirements, and as required in construction documents, would minimize the potential for accidental releases or emissions from hazardous materials.

Project operation would include the use of an approximately 1,000 gallon propane tank. The propane tank would be installed on a concrete or asphalt surface with traffic bollards to prevent contact with vehicles. Installation, operation, and maintenance of the propane tank would be subject to Sonoma County’s Certified Unified Program Agency (CUPA) requirements, including implementation of a Hazardous Materials Business Plan to be approved by the County, and compliance with the California Fire Code. Required compliance with Sonoma County requirements and the California Fire Code would reduce the potential hazard from use of the propane tank.

Plant nutrients, fertilizers, fungicides, and approved algaecides may be used during the cultivation operation. Quantities of bulk nutrients are normally transported and stored in plastic containers and then diluted with water for use on plants. Plant nutrients and fertilizers would be stored in a secure storage room without exposure to weather, sunlight or wind. These materials would be stored on pallets and/or shelving to minimize the possibility of spills and leaks going undetected. Liquid products would be stored in secondary containment, where needed. Generally, there is no disposal of agricultural chemicals since they are applied to and taken up by the plants. Any disposal of unused plant chemicals would be minor and the material would be taken to an appropriate solid waste disposal location as identified in product disposal instructions (most are safe for landfill disposal).

Additionally, as a condition of approval, the project would be required to comply with the following operating standard for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(g)(4):

All cultivation operations that utilize hazardous materials shall comply with applicable hazardous waste generator, underground storage tank, above ground storage tanks, and any AB 185 (hazardous materials handling) requirements and maintain any applicable permits for these programs from the Fire Prevention Division, Certified Unified Program Agency (CUPA) of Sonoma County Fire and Emergency Services Department, or the Agricultural Commissioner.

Therefore, the potential environmental impact associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

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:
Small amounts of hazardous materials would be used during construction and operation of the project (see Item 9.a above). Proper use of materials in accordance with local, State, and federal requirements, and as required in the construction documents, would minimize the potential for accidental releases or emissions from hazardous materials. Caltrans and the California Highway
Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. The California Division of Occupational Safety and Health (Cal-OSHA) enforces hazard communication program regulations which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees.

Storage, handling, and transportation of propane and other liquefied petroleum fuels are regulated by both the State of California Fire Code and Cal-OSHA. Businesses that utilize hazardous materials in California are required to develop and implement a Hazardous Materials Business Plan, which includes information on the location, type, quantity, and health risks of hazardous materials as well as employee training and emergency response plans designed to manage the potential hazards associated to storage, handling, and transportation of facility-specific hazardous materials.

Because the applicant and its contractors would be required to comply with existing and future hazardous materials laws and regulations addressing the transport, storage, use, and disposal of hazardous materials, the potential to create a significant hazard from accidental conditions would be less than significant.

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:
No existing or proposed schools are located within one-quarter mile of the project site. The nearest school, Two Rock Elementary, is located approximately 1.8 miles west of the project site on Spring Hill Road.

Significance Level: No Impact

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

Comment:
The provisions in Government Code Section 65962.5 are commonly referred to as the Cortese List. A search of the Cortese List was completed to determine if any known hazardous waste sites have been recorded on or adjacent to the project site (CalEPA 2019). The project site was not identified on, or in the vicinity of, any parcels on lists compiled by the California Environmental Protection Agency, Regional Water Quality Control Board, California Department of Toxic Substances Control, or the CalRecycle Waste Management Board Solid Development Waste Information System.

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 project site is not located within an Airport Referral Area as designated by the Sonoma County Comprehensive Airport Land Use Plan or within two miles of the Petaluma Municipal Airport or other public use airport.

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. The project would not change existing circulation patterns, would not generate substantial new traffic, and would not affect emergency response routes. Refer to Section 17 - Transportation, for further discussion of emergency access and project traffic.

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 Area Map (Figure PS-1g) in the Sonoma County General Plan and the Wildland Fire Threat map (Figure 8.8) in the Sonoma County Hazard Mitigation Plan, the project site is located in the State Responsibility Area and in an area designated as a Moderate Fire Hazard Severity Zone (Sonoma County 2014 & 2017). Moderate Zones are generally located in grasslands and valleys, away from significant forested or chaparral wildland vegetation, as is the case with the project site. The project would be required to comply with County Code Fire Safe Standards (Chapter 13), including but not limited to, providing emergency vehicle access, maintaining a dedicated fire-fighting water supply on-site, and installing fire sprinklers if future processing occurs at the project site. Additionally, the project would be required to comply with the following development standard for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(f)(16):

The applicant shall prepare and implement a fire prevention plan for construction and ongoing operations and obtain any permits required from the fire and emergency services department. The fire prevention plan shall include, but not be limited to: emergency vehicle access and turn-around at the facility site(s), vegetation management and fire break maintenance around all structures.

The proposed project is not located in a High or Very High Wildland Fire Hazard Area and would be required to comply with all Fire Safe Standards. Therefore, the project would not be likely to expose people or structures to a significant risk of loss, injury or death involving wildland fires.
Significance Level:  Less than Significant Impact

10. HYDROLOGY AND WATER QUALITY:

Would the project: 

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

Comment:
Waterways in the project area include a small unnamed ephemeral creek that flows northwesterly across the property, and an unnamed blue line drainage channel located near the intersection of Raven Road and Bodega Avenue. Both waterways are eventual tributaries to Stemple Creek, which is listed on the 303d list of impaired water bodies for sediment and nutrient levels (SWRCB 2016).

Construction activities have the potential to degrade water quality as a result of erosion caused by earthmoving activities during construction or the accidental release of hazardous construction chemicals. State Water Resources Control Board NPDES Order No. 2009-0009, as amended by Order No. 2012-0006, applies to public and private construction projects that include one or more acres of soil disturbance. The project would disturb approximately 0.85 acre at the project site and along Raven Road. If the use of staging areas requires additional land disturbance, it is possible that construction of the overall project would disturb one or more acres of land; therefore, compliance under Order No. 2009-0009 may be required. The General Permit requires submittal of a Notice of Intent (NOI) package, and development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) which, in addition to other requirements, must include Best Management Practices (BMPs) to protect the quality of stormwater runoff.

North Coast Regional Water Quality Control Board NPDES Order No. R1-2009-0045 applies to low threat discharges to surface waters in the North Coast Region, such as discharges from construction dewatering. The static groundwater level at the project site was measured as approximately 56 feet deep during a 2018 well pump test performed on the site. This groundwater depth is substantially lower than the depths of excavation required during construction. Therefore, construction activities are not anticipated to require temporary groundwater dewatering, and Order No. R1-2009-0045 is not anticipated to apply to the project.

Nearby surface waters are located outside the identified potential area of pumping influence for the existing on-site well (Hurvitz 2018). As noted above, the static groundwater level at the site was measured as approximately 56 feet deep during a 2018 well pump test performed on the site. Because of the vertical and horizontal separation of surface waters, it is unlikely that groundwater is providing recharge to surface streams or water bodies. Therefore, project pumping would not impact surface water flows.

On October 17, 2017, the State Water Resources Control Board adopted the Cannabis Cultivation Policy (Cannabis Policy) and the Statewide Cannabis General Order WQ 2017-0023-DWQ (Cannabis General Order) for General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities. The Cannabis Policy and Cannabis General Order include requirements to reduce impacts of waste discharges and
surface water diversions associated with cannabis cultivation. The Order requires submittal of a Site Management Plan describing BMPs to protect water quality, and may also require a Site Erosion and Sediment Control Plan, Disturbed Area Stabilization Plan, and/or Nitrogen Management Plan, depending on size and site characteristics of the operation. All outdoor commercial cultivation operations that disturb an area equal to or greater than 2,000 square feet of soil are required to enroll. Most commercial indoor cannabis cultivation operations are conditionally exempt, but must enroll in the program to obtain documentation of their conditionally exempt status. Compliance with the Cannabis General Order is a standard condition of approval for all cannabis permits.

The proposed project would consist of mixed light cannabis cultivation within a greenhouse. Wastewater from the cultivation system would be discharged to a proposed new on-site septic system and leach field. The Sonoma County Department of Agriculture/Weights & Measures has prescribed cannabis cultivation BMPs 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. The use of nutrients and pest control methods would be required to be conducted in accordance with the above BMPs, as well as with the “Legal Pest Management Practices for Marijuana Growers in California” guidelines, or similar guidelines approved in the future. The project would not utilize nutrients or pest controls classified as hazardous by type or volume.

Sonoma County also requires the project applicant to prepare a grading and drainage plan (Erosion Prevention and Sediment Control Plan) in conformance with Chapter 11 (Construction Grading and Drainage Ordinance) and Chapter 11A (Storm Water Quality Ordinance) of the Sonoma County Code and the Sonoma County Storm Water Low Impact Development Guide, all of which include performance standards and Best Management Practices for pre-construction, construction, and post-construction to prevent and/or minimize the discharge of pollutants, including sediment, from the project site. Required inspections by Permit Sonoma staff insure that all grading and erosion control measures are constructed according to the approved plans. The project would create approximately 20,450 square feet of new impervious surface, which could affect the quantity and/or quality of storm water run-off. The project proposes collection and conveyance of storm water from new impervious surfaces (other than the greenhouse roof) to a new on-site detention basin that would be sized to treat storm water runoff in accordance with the County Storm Water Low Impact Development Guide requirements. The project would also include a rainwater capture system to collect and store rainwater from the greenhouse roof area.

All of the above ordinance requirements, permits, and adopted BMPs are specifically designed to maintain potential water quality impacts at a less than significant level during and post-construction.

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: The project site is located within a Groundwater Availability Class 2 – Major Natural Recharge Area. The project site is located within the Wilson Grove Formation, which is considered unconfined to semiconfined with recharge to the aquifer likely occurring primarily from rainfall and creek beds proximate to the property (Hurvitz 2018). The project site is not within a Medium or High Priority
basin defined under the Sustainable Groundwater Management Act (SGMA). Although the project
would not be located in a SGMA basin or in a water scarce area (Zone 3 or 4) where a groundwater
report is required by General Plan Policy WR-2e and County Zoning Code (Sec 26-88-254(g)(10)), a
Hydrogeologic Assessment Report was prepared to address potential groundwater impacts under
CEQA (Hurvitz Environmental Services, 2018). The hydrogeologic assessment identified the
cumulative amount of development and groundwater uses allowed in the project area and assessed
the impact of the proposed project’s groundwater use on overdraft conditions, land subsidence,
saltwater intrusion, surface water resources, and neighboring wells.

**Water Use**

Water supply for the project would be provided by an on-site domestic groundwater well. The
estimated annual water use for the entire cultivation project is 514,860 gallons, which is
approximately 1.58 acre-feet of water per year. This annual water use would include the following:

- **Cultivation Water Use (1.22 acre-feet):** The drip irrigation system for the greenhouse cultivation
  operation would use approximately 0.363 gallons of water per plant per day, and would house
  approximately 3,000 plants, so daily water use would be approximately 1,089 gallons per day. This water
  use estimate is based on usage from previous projects with a 10% volume added for conservative purposes.
  The annual greenhouse water use is calculated as 1,089 gallons per day x 365 days per year = 397,485 gallons per year. This water use is equivalent to 1.22 acre-feet per year.

- **Evaporative Cooling Water Use (0.28 acre-feet):** Evaporative cooling would use approximately
  250 gallons of water per hour for 4 hours per day for 3 months out of the year. Therefore, the
  annual evaporative cooling water use is calculated as 250 gallons per hour x 4 hours per day x 90
days per year = 90,000 gallons per year. This water use is equivalent to 0.28 acre-feet per year.

- **On-Site Water Use (0.08 acre-feet):** The annual on-site worker water use is estimated to include
  15 gallons of water utilized per day per cultivation worker on-site. Therefore, the annual on-site
  worker water use is calculated as 5 (average number of daily employees) x 15 gallons per day x
  365 days per year = 27,375 gallons/year. This water use is equivalent to 0.08 acre-feet per year.

To offset some of the projected groundwater use, a rainwater harvesting system is proposed to
capture and store up to 20,000 gallons from the greenhouse roof. The rainwater capture offset was
calculated at 0.8 acre-feet per year.

**Water Use Impact Analysis**
The hydrogeologic assessment evaluated potential cumulative impacts based on the known
geologic, hydrologic, and groundwater characteristics in the area, encompassing 604 acres of land
surrounding the project site. The cumulative impact area encompassed 30 separate properties, 27
of which are properties developed with residences or single-family homes. The remaining parcels
are identified as Rural Residential, Pasture with Residence, or Pasture. The hydrogeologic
assessment includes a water balance for the 604 acre aquifer recharge area (cumulative impact
area). Aquifer storage within the cumulative impact area is estimated to be 3,020 acre-feet, with
annual recharge to the aquifer estimated to be approximately 139 acre-feet per year. In comparison,
the existing annual water demand within the cumulative impact area is estimated to be
approximately 30 acre-feet per year.
The estimated annual water use for the project is approximately 1.58 acre-feet of groundwater use per year. The potential future water demand in the aquifer recharge area, which includes the project plus potential future projects, is estimated to be approximately 58 acre-feet per year. Based on the conservative assumptions and estimates presented in the hydrogeologic assessment, the quantity of groundwater to be used for the project and within the cumulative impact area compared to the quantity of available groundwater indicates that pumping for the project is unlikely to result in significant declines to groundwater resources over time. The assessment determined that the aquifer within which the project is located is not in a state of overdraft.

A well interference analysis was conducted to investigate the potential for project pumping to cause localized drawdown of the groundwater table at nearby wells owned by others. The maximum daily project water demand is estimated to be 2,180 gallons, which would require approximately 5 hours and 20 minutes of pumping with a well yield of 7 gallons per minute. As estimated for an unconfined aquifer, pumping the existing project well at 7 gallons per minute for 72 hours straight may result in a zone of pumping influence extending 300 feet from the well, which is the distance to the closest neighboring well. Because the maximum daily project water demand would require approximately 5.5 hours of pumping, the extent of pumping influence from the project well would be less than that required to result in a zone of pumping influence that reaches a nearby well (i.e., 72 hours of continuous pumping).

The project would result in only minor increases in impermeable surfaces to the local aquifer recharge area (20,450 square feet of new impervious surface). Therefore, the project would have a very small effect on groundwater recharge.

Additionally, the County has several standard conditions of approval related to water use which would apply to this project, including installation of a groundwater level monitoring device pursuant to General Plan Policy WR-2d, including installation of a water meter(s) on the water system and quarterly groundwater extraction reports, with the further provision that in the event actual project groundwater use exceeds projected use (1.58 acre-feet per year), project groundwater use would be subject to additional County review.

The results of the groundwater study combined with the additional County review and oversight required through multiple standard conditions of approval would ensure that the project does not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Note that the 1.58-acre-foot water budget does not take into account the 0.8-acre-foot offset anticipated from rainwater capture, so is more conservative than likely to occur.

**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:**
The project would not alter an existing stream, river, drainage channel or wetland feature. Grading would occur only in the southeast portion of the parcel. Construction grading activities would be subject to a grading permit, which requires installation of adequate stormwater treatment measures to prevent soil erosion during construction, such as silt fencing, straw wattles, and soils discharge controls at construction site entrance(s). Compliance with the County grading regulations is aimed at capturing and treating all project runoff onsite, thereby reducing the potential for soil erosion and sediment delivery from the site.

Following construction, drainage patterns at the project site would remain essentially the same as they currently exist. The project would collect rainwater from the rooftop of the new greenhouse, and storm water from other impervious surfaces would be conveyed to a new on-site detention basin that would be sized to treat storm water runoff in accordance with the County requirements. Because operation of the project would not substantially alter drainage patterns or substantially increase runoff, substantial erosion and siltation is not anticipated.

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 off-site?

Comment:
The project would not alter an existing stream, river, drainage channel or wetland feature, and the project site is not located within a 100-year flood plain. The project would collect rainwater from the rooftop of the new greenhouse, and storm water from other impervious surfaces would be conveyed to a new on-site detention basin that would be sized to treat storm water runoff in accordance with the County requirements. Therefore, the project would not substantially alter drainage patterns or substantially increase surface runoff in a manner that would result in flooding.

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?

Comment:
The project would collect rainwater from the rooftop of the new greenhouse, and storm water from other impervious surfaces would be conveyed to a new on-site detention basin that would be sized to treat storm water runoff in accordance with the County requirements. The project improvements would not increase surface runoff in a manner that would exceed the capacity of existing or planned storm water drainage systems. The project would require a grading permit, which would not be issued until all recommended feasible stormwater treatment options have been incorporated in compliance with all applicable standards of the County Code.

Significance Level: Less than Significant Impact

iv. Impede or redirect flood flows?

Comment:
The project would not alter an existing stream, river, drainage channel or wetland feature. No
portion of the project site is located within a 100-year flood hazard area (FEMA 2008).

**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 within a 100-year flood hazard area (FEMA 2008) or in an area that would be subject to flooding as a result of a levee or dam failure (Sonoma County General Plan Figure PS-1f). The project site is not located near a large isolated body of water that may be affected by a seiche, or within an area mapped as being at risk to tsunamis.

**Significance Level:** No Impact

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

**Comment:**
As described under item 10b, the project is located within a Groundwater Availability Class 2 – Major Natural Recharge Area. The project site is not within a Medium or High Priority basin defined under the Sustainable Groundwater Management Act. Additionally, a Hydrogeologic Assessment Report prepared to address potential groundwater impacts under CEQA (Hurvitz Environmental Services, 2018) found that the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge or impede sustainable groundwater management of the basin.

As described under item 10.a and 10.c, the project would be required to comply with ordinance requirements, permits, and adopted BMPs that are specifically designed to maintain potential water quality impacts at a less than significant level during and post-construction. No conflicts with a water quality control plan have been identified.

**Significance Level:** Less than Significant Impact

11. **LAND USE AND PLANNING:**

Would the Project:

a) **Physically divide an established community?**

**Comment:**
The proposed project would not physically divide a community. The project would not involve construction of a physical structure (such as a major transportation facility) or removal of a primary access route (such as a road or bridge) that would impair mobility within an established community or between a community and outlying areas. No impact would occur.

**Significance Level:** No Impact
b) **Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

**Comment:**

The General Plan Land Use Designation for the project is Land Extensive Agriculture. The site is also designated Land Extensive Agriculture by the Petaluma Dairy Belt Area Plan. This land use designation is intended enhance and protect lands capable of and generally used for animal husbandry and the production of food, fiber, and plant materials in areas where soil and climate conditions typically result in relatively low production per acre of land.

The Zoning Designation for the project site is also Land Extensive Agriculture, which allows commercial cannabis cultivation (up to 1 acre of cultivation area), including ancillary processing operations, with a use permit (Sec. 26-06-020(t)).

Specific General Plan policies adopted for the purpose of avoiding or mitigating environmental effects are evaluated in this document under the corresponding issue areas; for example, policies related to noise are evaluated in Section 12 Noise. General Plan policies relevant to the Land Use and Planning section are listed below:

*Policy LU-11f:* Encourage conservation of undeveloped land, open space, and agricultural lands, protection of water and soil quality, restoration of ecosystems, and minimization or elimination of the disruption of existing natural ecosystems and flood plains.

*Policy AR-2a:* Apply agricultural land use categories based on the capability of the land to produce agricultural products. Unless allowed by the Public Facilities and Services Element, limit extension of sewer service to these lands except by out-of-district agreement to solve a health and safety problem.

*Policy AR-4a:* The primary use of any parcel within the three agricultural land use categories shall be agricultural production and related processing, support services, and visitor serving uses. Residential uses in these areas shall recognize that the primary use of the land may create traffic and agricultural nuisance situations, such as flies, noise, odors, and spraying of chemicals.

Approval of cannabis use permits requires compliance with multiple Development Criteria and Operating Standards from the Zoning Code intended to avoid and minimize potential environmental impacts (Sec. 26-88-250 and 254). No conflicts with Development Criteria or Operating Standards have been identified and no exceptions or reductions to standards would be necessary to approve the project.

The project would not require extension of sewer service, as the project would include an on-site septic system for wastewater disposal.

The primary use of any parcel within one of the three agricultural land use categories must involve agricultural production and related processing, support services, and visitor serving uses. Allowed non-agricultural land uses must be conducive to continued agricultural production. Although the parcel is small (7.59 acres), livestock grazing occurs and will continue on approximately 4 acres of land, about 53 percent of the total land acreage. A condition of approval will require that the grazing use (or other comparable agricultural use) be continued as long as the permit is active.
No housing or residential units would be constructed as part of the project, which could result in an incompatible future use due to nuisance complaints. The existing residential development will remain, but not be expanded. The project will result in permanent loss of approximately 0.85 acre of potential farmland, within the footprint of the cultivation building, parking area, and access improvements, which equates to about 11 percent of the total land acreage. Although the proposed greenhouse is intended for cannabis cultivation, greenhouses are generally agricultural in nature, and could be utilized for and be compatible with a future traditional agricultural use on the parcel.

No conflicts with other general plan policies related to scenic, cultural, biotic resource protection, noise, or transportation have been identified. No conflicts with Development Criteria or Operating Standards have been identified and no exceptions or reductions to standards would be necessary to approve the project. Therefore, the project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

**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 Sonoma County Aggregate Resources Management Plan (Sonoma County 2010) identifies aggregate resources of statewide or regional significance (areas classified as MRZ-2 by the State Geologist). The project site is not located within a designated mineral resource deposit area (Sonoma County 2010), or within an area classified as MRZ-2 in the California Geologic Survey Special Report 205 (CGS 2013).

**Significance Level:** No Impact

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

**Comment:**
The project site is not zoned MR (Mineral Resources), and is not located within a locally-important mineral resource recovery site. No locally-important mineral resources are known to occur at the site.

**Significance Level:** No Impact

### 13. NOISE:

Would the project result in:
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?

Project Construction Noise

Comment:
The County’s General Plan and Zoning code do not establish construction-related noise standards. Therefore, construction activities would not generate noise levels in excess of applicable standards. However, the project would result in a temporary increase in ambient noise levels in the project vicinity during construction. Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time. The project is not anticipated to require nighttime construction activity. However, the project would temporarily increase noise levels during construction in the project area, including residences located adjacent to Raven Road, over an approximately six-month period. Implementation of Mitigation Measure NOISE-1 would reduce the noise impact from construction activities and hauling to a less than significant level.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure NOISE-1 Reduce Construction Noise Levels: The applicant and its contractor shall adhere to the following construction best management practices to reduce construction noise levels emanating from construction activities and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.

a) A Construction Coordinator shall be designated by the project applicant, and a sign shall be posted on the site stating the allowable hours of construction, and including the Coordinator’s 24-hour phone number for public contact regarding noise issues. The Coordinator shall investigate all complaints to determine the cause (such as starting too early, faulty muffler, etc.), and shall take prompt action to correct any problem. The Coordinator shall report all complaints and their resolutions to Permit Sonoma staff.

b) All internal combustion engines used during construction shall be operated with mufflers that meet the requirements of the State Resources Code, and, where applicable, the Vehicle Code. Equipment shall be properly maintained and turned off when not in use.

c) Except for actions taken to prevent an emergency or to deal with an existing emergency, all construction activities (including equipment start-up, operation, servicing, and deliveries) shall be restricted to the hours of 7:00 a.m. and 7:00 p.m. on weekdays and 9:00 a.m. and 7:00 p.m. on Saturdays. No construction shall occur on Sundays or holidays. If work outside the times specified above becomes necessary, the applicant shall notify the Permit Sonoma staff as soon as practical.
d) Construction maintenance, storage and staging areas for construction equipment shall avoid proximity to residential areas to the maximum extent practicable. Stationary construction equipment, such as compressors, mixers, etc., shall be placed away from residential areas and/or provided with acoustical shielding. Quiet construction equipment shall be used when possible.

Mitigation Monitoring:

**Mitigation Monitoring NOISE-1 Reduce Construction Noise Levels:** Prior to issuance of grading or building permits, Permit Sonoma staff shall verify that the NOISE-1 measures are included on all site alteration, grading, building or improvement plans. The applicant shall submit documentation to Permit Sonoma staff that a Construction Coordinator has been designated and that appropriate signage has been posted including the Coordinator’s phone number. Documentation may include photographic evidence or a site inspection, at the discretion of Permit Sonoma staff. Any noise complaints not immediately resolved by the Coordinator shall be investigated by Permit Sonoma staff. If violations are found, a noise consultant may be required at the applicant’s expense to evaluate the problem and recommend corrective actions. Continuing or unresolved noise violations may result in an enforcement action and/or revocation or modification proceedings, as appropriate.

**Project Operational Noise**

**Comment:**
To evaluate operational noise impacts, a Noise Study was completed for the project by RGD Acoustics (RGD 2018). The Noise Study quantified the ambient noise levels in the project vicinity, estimated the operational noise levels associated with the proposed cannabis production facility, and evaluated predicted noise levels to the standards established in General Plan Policy NE-1c. For reference, General Plan Policy NE-1c reads as follows:

**General Plan Policy NE-1c:** Control non-transportation related noise from new projects. The total noise level resulting from new sources shall not exceed the standards in Table NE-2 (Table 2 below) as measured at the exterior property line of any adjacent noise sensitive land use. Limit exceptions to the following:

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

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

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

4) For short term noise sources which are permitted to operate no more than six days per year, such as concerts or race events, the allowable noise exposures shown in Table NE-2 may be increased by 5 dBA. These events shall be subject to a noise management plan including provisions for maximum noise level limits, noise monitoring, complaint response and allowable hours of operation. The plan shall address potential cumulative noise impacts from all events in the area.
5) Noise levels may be measured at the location of the outdoor activity area of the noise sensitive land use, instead of the exterior property line of the adjacent noise sensitive land use where:
   a. the property on which the noise sensitive use is located has already been substantially developed pursuant to its existing zoning, and
   b. there is available open land on those noise sensitive lands for noise attenuation.

This exception may not be used on vacant properties which are zoned to allow noise sensitive uses.

| Table 2. Maximum Allowable Exterior Noise Exposures for Non-transportation Noise Sources (Table NE-2 from General Plan) |
|-----------------|---------------------|---------------------|
| Hourly Noise Metric (dBA) | Daytime (7 a.m. to 10 p.m.) | Nighttime (10 p.m. to 7 a.m.) |
| L50 (30 minutes in any hour) | 50 | 45 |
| L25 (15 minutes in any hour) | 55 | 50 |
| L08 (5 minutes in any hour) | 60 | 55 |
| L02 (1 minute in any hour) | 65 | 60 |

1The sound level exceeding n% of the time in any hour. For example, the L50 is the value exceeded 50% of the time or 30 minutes in any hour; this is the median noise level.

Ambient Noise Levels in Project Area
A noise measurement program was conducted at the project site to quantify ambient noise levels, including one continuous long-term noise measurement and two short-term measurements. RGD Acoustics compiled the day-night average sound levels and the representative ambient noise levels by averaging the four quietest hours during the daytime and nighttime. The dominant noise source identified in the project area was traffic on Bodega Avenue. In accordance with General Plan Policy NE-1c, the outdoor areas of adjacent residences to the project site were used as assessment locations. The representative ambient noise levels identified for adjacent residences are summarized in Table 3. The ambient noise levels at the five residences were below all four hourly noise metric thresholds identified in General Plan Policy NE-1c (i.e., quieter than established thresholds).

<table>
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<tr>
<th>Table 3. Ambient Noise Levels at the Residences</th>
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Operational Noise Analysis
To predict the non-transportation related operational noise associated with the project, RGD Acoustics evaluated the equipment the project would utilize during the operational phase. The equipment included 54-inch and 24-inch ventilation fans, an air-conditioning unit, dehumidifiers, and a back-up generator. A standard attenuation rate of 6 dBA per doubling of distance was used as well as a standard rate of 3 dBA per doubling of noise sources to account for the use of multiple pieces of equipment. For indoor equipment, a noise attenuation of 15 dBA was applied to account for insulation provided by the greenhouse facility.
The calculated noise levels at adjacent residences from the operation of project-related mechanical equipment would range from 31 to 43 dBA \(L_{50}\) during the daytime period, and from 21 to 34 dBA \(L_{50}\) during the nighttime period. This range of noise levels does not exceed the General Plan \(L_{50}\) noise limits of 50 dBA and 45 dBA during the daytime and nighttime periods, respectively. Operation of the project would also include the use of mobile machinery (i.e., electric forklifts). The calculated noise levels at adjacent residences from the operation of forklifts ranges from 27 to 45 dBA \(L_{25}\). This range of noise levels does not exceed the General Plan \(L_{25}\) noise limits of 55 dBA and 50 dBA during the daytime and nighttime periods, respectively.

In all cases, the calculated noise levels from non-transportation related project activities do not exceed the General Plan noise limits of Policy NE-1c at adjacent residences. Therefore, the impact would be less than significant.

Based on use of the Federal Highway Administration’s Traffic Noise Model, the noise from additional project-related traffic traveling on Bodega Avenue would result in a less than 1 dBA \(L_{dn}\) increase. For the residences along Raven road, assuming that half the proposed daily passenger car trip and a truck trip would occur within the same hour and are traveling at 10 mph, the calculated traffic noise is an hourly average noise level of 46 dBA \(Leq\) at a distance of 40 feet from the roadway centerline. Compared to the hourly average noise level in the area, this would result in an increase in hourly \(Leq\) of 1 dBA or less.

The Noise Study indicates that the noise levels from the combined project sources (transportation and non-transportation) noted above would contribute 1 dBA or less to the overall noise level at the nearest residences. The predicted increase in ambient noise levels is below applicable thresholds.

**Significance Level:** Less than Significant Impact

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

**Comment:**
The project includes construction activities that may generate minor perceptible ground borne vibration and noise when heavy equipment or impact tools are used. For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec peak particle velocity (PPV) for buildings that are structurally sound and designed to modern engineering standards, and a limit of 0.3 in/sec PPV for older residential structures. For the purposes of this analysis, residences along Raven Road are considered older residential structures, therefore, a limit of 0.3 in/sec PPV is used.

Vibration levels associated with project construction would vary depending on soil conditions, construction methods, and equipment used. The project is not expected to require pile driving. Therefore, the vibration levels from construction activities would be expected to be 0.2 in/sec PPV or less at a distance of 25 feet both at the project site and along Raven Road during paving. These levels would not be significant because they would be below the 0.3 in/sec PPV significance threshold used to assess potential cosmetic damage to older residential buildings. Ground borne noise would be short-term and temporary, and would be limited to daytime hours. The impact would be less than significant.
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 located within an Airport Referral Area as designated by the Sonoma County Comprehensive Airport Land Use Plan, or within two miles of a public airport. People residing or working in the project area would not be exposed to excessive aircraft noise. No Impact would occur.

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 proposed project does not involve the construction of new housing. The project would create a modest demand for new employees (approximately 6 new full time employment opportunities). The increase in employment opportunities is not anticipated to result in an indirect increase in population, as it is anticipated that the employees would be existing residents of Sonoma County. Therefore, the project is not anticipated to induce substantial population growth. No new infrastructure is proposed. Therefore, the project would not induce substantial population growth.

Significance Level: Less than Significant Impact

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

Comment:
No housing or people would be displaced by the project and no replacement housing would be required. The existing primary residence on the parcel will remain and be used as employee housing.

Significance Level: No Impact

15. PUBLIC SERVICES:

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

Comment:
The proposed project does not involve the construction of new housing. The project would create a modest demand for new employees (approximately 6 new full-time employment opportunities). The increase in employment opportunities is not anticipated to result in an indirect increase in population, as it is anticipated that the employees would be existing residents of Sonoma County. Therefore, the proposed project would not require construction of new or physically altered governmental facilities. No impact would occur.

Significance Level: No Impact

i. Fire protection?

Comment:
The proposed project is within the service area of the Petaluma Fire Department. Although the project would increase employment opportunities (approximately 6 full-time employees), it is anticipated that the project would draw from local workers in the County and no indirect increase in population would occur. Therefore, the increased demand for fire protection would be small. The County Fire and Emergency Services Department reviewed the project referral and provided conditions of approval to comply with the County Fire Safe Ordinance, including fire protection methods such as alarm systems, extinguishers, vegetation management, emergency water supply for fire protection, hazardous materials management and management of flammable or combustible liquids and gases. None of the conditions required construction of new or expanded fire protection facilities. Therefore, the project would not necessitate or facilitate construction of new fire protection facilities in order to maintain acceptable service ratios or response times.

Significance Level: Less than Significant Impact

ii. Police?

Comment:
The Sonoma County Sheriff would continue to serve the project area. No housing or residential units would be constructed as part of the project. Although the project would increase employment opportunities (approximately 6 full-time employees), it is anticipated that the project would draw from local workers in the County and no indirect increase in population would occur. Additionally, the project would be required to comply with the security development standard for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(f)(21), including implementation of a site security plan. The project would not necessitate or facilitate construction of new police protection facilities resulting in environmental impacts in order to maintain acceptable service ratios or response times.

Significance Level: Less than Significant Impact
iii. Schools?

Comment:
No housing or residential units would be constructed as part of the project. Although the project would increase employment opportunities (approximately 6 full-time employees), it is anticipated that the project would draw from local workers in the County and no indirect increase in population would occur. Therefore, the project would not introduce new school age children in the project area, and would not necessitate or facilitate construction of new schools resulting in environmental impacts.

Significance Level: No Impact

iv. Parks?

Comment:
No residential units would be included in the project that would require the payment of parkland development fees. The proposed project does not involve the construction of new housing, which is the typical type of development that requires expansion of recreational facilities. Although the project would increase employment opportunities (approximately 6 full-time employees), it is anticipated that the project would draw from local workers in the County and no indirect increase in population would occur. Given the number of existing park and recreational options available in the project vicinity, the existing park facilities would be adequate and the project would not necessitate or facilitate construction of new parks resulting in environmental impacts.

Significance Level: No Impact

v. Other public facilities?

Comment:
The project would not be served by public sewer, water facilities, or other public facilities. Therefore, no new other public facilities would be required to be built. No impact would occur.

Significance Level: No Impact

16. RECREATION:

Would the project:

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

Comment:
The proposed project would create a modest demand for new employees (approximately 6 new full time employment opportunities). The new employees may use nearby park facilities, such as Helen Putnam Regional Park. However, the increase in the number of employees would be small, and
would not be expected to contribute noticeably to the deterioration of recreational facilities. Therefore, the proposed project would not involve activities that would cause or accelerate substantial physical deterioration of parks or recreational facilities. The project will have no impact on the use of existing neighborhood and 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 or require the construction of recreational facilities. The proposed project does not involve the construction of new housing, which is the typical type of development that requires expansion of recreational facilities. No impact would occur.

**Significance Level:** No Impact

17. **TRANSPORTATION:**

Would the project:

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

**Comment:**
Based on trip generation rates published by the Institute of Transportation Engineers (ITE), the project would be expected to generate an average of 50 trips per day, including seven trips during the weekday a.m. peak hour and six trips during the p.m. peak hour (W-Trans 2019). Based on site-specific operational parameters, it is anticipated that the project would more accurately generate approximately 20 daily trips, consisting of 16 trips for employees and four trips for deliveries. Both the ITE trip rate estimates and project specific trip estimates indicate the project would result in less than 10 trips during each peak hour. Because the project would result in less than 10 trips during each peak hour, a full traffic impact study is not required for the project, per County of Sonoma Traffic Impact Study Guidelines. Therefore, a focused traffic study was completed for the project (W-Trans 2019).

Regional access to the project site would be from Bodega Avenue, which is identified as a Rural Minor Collector in the Sonoma County General Plan (Sonoma County 2008), and has since been recategorized to a Major Collector. The General Plan establishes an objective of maintaining LOS C or better during Weekday PM Peak Hour for minor collectors such as Bodega Avenue. According to traffic counts available on the County of Sonoma Department of Transportation and Public Works website, the section of Bodega Avenue between King Road and Pepper Road has an average daily traffic (ADT) volume of approximately 5,060. Given the minimal number of peak hour trips that would be generated by the project and the existing volumes of vehicles on local roadways, the project would have a less than significant impact on level of service standards.
The General Plan and Countywide Bicycle and Pedestrian Master Plan identify a proposed Class II bikeway along Bodega Avenue in the project area. The project would not reconstruct Bodega Avenue or impede the operation of bike lanes. No transit routes are currently operated along Bodega Avenue in the project area, and the project would not cause a substantial increase in transit demand that cannot be accommodated by existing or proposed transit capacity or alternative travel modes in the regional area. The project would not conflict with policies promoting public transit or bicycle and pedestrian facilities.

**Significance Level:** Less than Significant Impact

b) **Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

**Comment:**
In November 2017, the Governor's Office of Planning and Research (OPR) released a technical advisory containing recommendations regarding the assessment of vehicle miles travelled (VMT). VMT refers to the amount and distance of automobile travel attributable to a project. As noted in the OPR guidelines, agencies are directed to choose metrics that are appropriate for their jurisdiction to evaluate the potential impacts of a project in terms of VMT. The change to VMT was formally adopted as part of updates to the CEQA Guidelines on December 28, 2018. The current deadline for adopting policies to implement SB 743 and the provisions of CEQA Guidelines section 15064.3(b) is July 1, 2020. The County of Sonoma has not yet adopted VMT policies, and, until the County does, there is no guidance on how to evaluate the proposed project in terms of VMT. Therefore, the project would not conflict with or be inconsistent with an applicable threshold of significance adopted per CEQA Guidelines section 15064.3, subdivision (b).

**Significance Level:** No 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:**
Regional access to the project site would be from Bodega Avenue. The section of Bodega Avenue that provides access to the Raven Road is 40 feet wide and has a 12-foot travel lane and eight-foot shoulder in each direction. The project would not alter the existing alignment of Bodega Avenue. The existing sight distance at the driveway of Raven Road at Bodega Avenue extends more than 600 feet in both directions, which adequately meets sight distance criteria (W-Trans 2019). Adequate sight distance would also be achieved in both directions for a following driver to see and react to a vehicle stopped to turn into the project driveway (W-Trans 2019). The driveway apron to Raven Road will also be paved as part of the project to allow for the smooth and safe movement of vehicles entering and exiting Bodega Avenue. All cultivation activities would occur in the parcel interior; no farm equipment would use the public roadway. The potential for hazards due to a design feature would be less than significant.

**Significance Level:** Less than Significant Impact

d) **Result in inadequate emergency access?**

**Comment:**
The project would be required to comply with the emergency vehicle access requirements of the Sonoma County Fire Safety Code (Sonoma County Code Chapter 13). Project development plans would be required to be reviewed by a Department of Fire and Emergency services Fire Inspector during the building permit process to ensure compliance with emergency access issues. Given the requirement for compliance with emergency vehicle access standards, the operational impact on emergency services would be less than significant.

Significance Level: Less than Significant Impact

e) Result in inadequate parking capacity?

Comment:
Parking capacity is analyzed as a matter of County policy and not because such analysis is required by CEQA. Sonoma County Code Section 26-86 does not include specific parking requirements for cannabis cultivation land uses; however, similar uses such as warehousing recommend one space per 2,000 square feet of building floor area. The project would not be open to the public, and on-site parking would be designated primarily for employees. Project plans show the provision of nine parking spaces (including one van-accessible space), which would adequately accommodate parking demand in accordance with parking regulations in the Sonoma County zoning code.

Significance Level: No Impact

18. TRIBAL CULTURAL RESOURCES:

Would the project:

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 section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Comment:
Efforts to identify tribal cultural resources that could be affected by the project consisted of a records search at the Northwest Information Center, literature review, a sacred lands search through the Native American Heritage Commission, contact with appropriate local Native American Tribes, and a pedestrian archaeological survey of the project site.
California Native American tribes were notified according to Public Resources Code section 21080.3.1 on October 4, 2017. The request for consultation period ended on November 3, 2017, with no Native American tribes requesting consultation for the project. California Native American tribes were also notified of the project on May 10 and May 16, 2018 during completion of the Cultural Resources Study of 6095 Bodega Avenue (ASC, 2019), with no known tribal cultural resources identified.

No tribal cultural resources (as defined in Public Resources Code section 5020.1(k) are known to exist within the project area. However, the results of the Cultural Resources Study for the project site indicates there is a moderate sensitivity for buried prehistoric archaeological resources at the project site. Therefore, although no known tribal cultural resources were identified within the project area, the potential exists for encountering previously undiscovered resources during project construction.

Implementation of Mitigation Measure CUL-1 would reduce the potential impact by outlining procedures to be taken in the event of inadvertent discovery.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation
Implement Mitigation Measure CUL-1 Archaeological Monitoring and Inadvertent Discovery Procedures

Mitigation Monitoring
See Mitigation Monitoring CUL-1 Archaeological Monitoring and Inadvertent Discovery Procedures

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, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Comment:
The project would not contribute to the need for construction or expansion of water or wastewater treatment facilities, other than use of an existing on-site groundwater well and a new on-site septic system. The creation of new impervious surfaces at the site would increase storm water runoff, however, the project would collect rainwater from the rooftop of the new greenhouse, and storm water from other impervious surfaces would be conveyed to a new on-site detention basin that would be sized to treat storm water runoff in accordance with County requirements. Therefore, no off-site storm water drainage improvements would be required. The project would include installation of a new commercial electrical power line and transformer on the project site, which would be maintained by Pacific Gas and Electric. The potential environmental impacts associated with construction of the proposed utilities are evaluated as part of this Initial Study. No additional relocation or construction of off-site utilities beyond those identified in the project description and
evaluated in this Initial Study would be required that would cause environmental effects.

**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:**
The project is not located in a water scarce area, nor within a State defined Priority Groundwater Basin (Sonoma County 2016, Hurvitz 2018). Water supply would be provided by an on-site well, which is located in a Zone 2 groundwater area (Major Natural Recharge Area). The project would not result in a direct or indirect increase in population that would result in an increased demand for water supplies. No new regional water supply entitlements or facilities would be required. The water demand proposed for the project is sustainable based on current and future development within the cumulative impact area (Hurvitz Environmental 2018). Additionally, the project would include a rainwater harvesting system that would capture up to 20,000 gallons from the greenhouse building roof. The rainwater would be filtered and used to supplement cultivation irrigation.

**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:**
A proposed on-site septic system would be constructed to manage project wastewater. The project would not result in additional wastewater treatment demand for an off-site sanitation system.

**Significance Level:** No Impact

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

**Comment:**
Sonoma County has a solid waste management program in place that provides solid waste collection and disposal services for the entire County. The program can accommodate the permitted collection and disposal of the waste that would result from the proposed project. Active permitted regional landfills include the Redwood Sanitary Landfill (26 million cubic yards remaining capacity), Potrero Hills Landfill (13.9 million cubic yards remaining capacity), Vasco Road Landfill (7.4 million cubic yards remaining capacity), and Keller Canyon Landfill (63.4 million cubic yards remaining capacity) (CalRecycle 2016). Solid waste generated during construction and operation of the project would represent a small fraction of the daily permitted tonnage of these facilities.

Additionally, the project would be required to comply with the following operating standard for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(g)(8):

* 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. The 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 the 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 the site shall not be accumulated or stored for more than seven (7) 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:
No applicable federal solid waste regulations would apply to the project. At the State level, the Integrated Waste Management Act mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. Sonoma County has access to adequate permitted landfill capacity and reduction, reuse, and recycling programs to serve the proposed project. Construction and operational waste generated as a result of the project would require management and disposal in accordance with local and state regulations. The project would not conflict with or impede implementation of such programs.

Significance Level: Less than Significant Impact

20. WILDFIRE:

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:
The project would not impair implementation of an adopted emergency response plan. There is no separate emergency evacuation plan for the County, and the project would not change existing circulation patterns or effect emergency response routes. Project development plans would be required to be reviewed by a Department of Fire and Emergency Services Fire Inspector during the building permit process to ensure adequate emergency access is provided to the site.

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:
Wildfire risk is dependent upon existing environmental conditions, including but not limited to the amount of vegetation present, topography, and climate. The project site is located within a rural area surrounded by open fields and gently sloping hillsides. Climate in the area is characterized as Mediterranean, with cool wet winters and hot dry summers.

According to the Wildland Fire Hazard Area map in the Sonoma County General Plan, the project site is located in the State Responsibility Area, and is designated as a Moderate Fire Hazard Severity Zone. Moderate Zones are generally located in grasslands and valleys, away from significant forested or chaparral wildland vegetation, as is the case with the project site. Projects located in High and Very High Fire Severity Zones are required by state and county code to have a detailed vegetation management plan developed and reviewed by the Sonoma County Fire Prevention Division before a building permit can be issued. This requirement does not apply to projects located in a Moderate Zone. However, all construction projects must comply with County Code Fire Safe Standards (Chapter 13), including but not limited to, installing fire sprinklers in buildings, providing emergency vehicle access, and maintaining a dedicated fire-fighting water supply on-site.

In addition, the project would be required to comply with the following Development Standard for commercial cannabis cultivation facilities contained in County Zoning Code Section 26-88-254(f)(16):

- The applicant shall prepare and implement a fire prevention plan for construction and ongoing operations and obtain any permits required from the fire and emergency services department. The fire prevention plan shall include, but not be limited to: emergency vehicle access and turnaround at the facility site(s), vegetation management and fire break maintenance around all structures.

The project would construct and operate a mixed light commercial cannabis facility within an area designated as having a moderate wildfire risk. The project would be required to be built in compliance with applicable Fire Safe Standards, including provision of adequate emergency access and fire water supply, which would reduce the potential hazard of wildfires. Therefore, the project would have a less than significant impact regarding exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

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 or that may result in temporary or ongoing impacts to the environment?

Comment:
Proposed infrastructure improvements would include improvements to the roadway entrance immediately adjacent to Bodega Avenue, installation of a new driveway adjacent to the greenhouse to accommodate turnaround space for emergency vehicles, installation of a new commercial electrical power line and transformer, and installation of water tanks for dedicated fire water
supplies.

The commercial power line would be maintained by the local power company, Pacific Gas and Electric. The project would include an on-site water supply source and water storage to provide required fire suppression, an upgraded driveway with a turnaround space for emergency vehicles, and inclusion of required design aspects in order to comply with Fire Safe Standards included in the Sonoma County Zoning Code (Chapter 13). In addition, Zoning Code Development Standards require implementation of a fire prevention plan and vegetation management. Installation and maintenance of the proposed minor infrastructure improvements are not anticipated to exacerbate fire risk or result in temporary or ongoing environmental impacts.

**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 project site is not located in an area at high risk for flooding, such as a 100-year flood hazard area. Additionally, drainage patterns at the project site would remain essentially the same as under existing conditions. The project would collect rainwater from the rooftop of the new greenhouse, and storm water from other impervious surfaces would be conveyed to a new on-site detention basin that would be sized to treat storm water runoff in accordance with County requirements. Therefore, operation of the project would not substantially alter drainage patterns or increase runoff which would expose people or structures to significant downslope flooding.

The project site is located on gently sloping ground surfaces and is not located within a deep-seated landslide hazard area, or on a mapped landslide complex or debris flow source area. It is unlikely that a landslide would occur on-site as a result of runoff, post-fire slope instability, or drainage changes. Therefore, it is not anticipated that the project would expose people or structures to significant risks including flooding or landslides as a result of runoff, post-fire instability, or drainage changes.

**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?

Potential project impacts to biological and cultural resources are addressed in Section 4, Biological Resources and Section 5, Cultural Resources, respectively. With implementation of the recommended mitigation measures identified in this IS/MND, the potential for project-related activities to degrade the quality of the environment, including fish or wildlife species or their
habitat, plant or animal communities, or important examples of California history or prehistory would be reduced to less than significant levels.

**Significance Level:** Less than Significant with Mitigation Incorporated

**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)?

Cumulative impacts are defined as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

A search was undertaken to identify reasonably foreseeable projects in the vicinity of the project area that may have overlapping or cumulative impacts with the proposed project. Six other applicants have applied for cannabis cultivation projects in the unincorporated western Petaluma area (about a 5-mile radius from the project site), ranging in size from 500 square feet to 1 acre. One of these, a Zoning Permit for a 500-square foot indoor cultivation operation, has been issued and is operational. One Use Permit for a combined acre (indoor, outdoor, and mixed light) is in Approved Condition Compliance, but not yet operating. Three of these are working through the County cannabis permit program. One has an incomplete application, which is not currently being processed. No other proposed discretionary projects were identified within the vicinity.

Project-related construction activities are relatively benign and would result in limited, minimal, and short-term impacts. The project-level mitigation measures identified in this Expanded Initial Study would ensure project-related construction impacts are not cumulatively considerable.

The relatively large average parcel size in the surrounding area reduces potential for cumulative aesthetic impacts related to additional construction or commercial activity that could occur in the area. Such future uses would be separated enough to diminish the visual impact of the overall viewshed from any particular location.

The cumulative impact area for the hydrogeologic study encompassed 604 acres of land surrounding the project site. Aquifer storage within the cumulative impact area was estimated to be 3,020 acre-feet, with annual recharge to the aquifer estimated to be approximately 139 acre-feet per year. In comparison, the existing annual water demand within the cumulative impact area was estimated to be approximately 30 acre-feet per year. The potential future water demand in the aquifer recharge area, which includes the project plus potential future projects, is estimated to be approximately 58 acre-feet per year (Hurvitz 2018). Based on the conservative assumptions and estimates presented in the hydrogeologic assessment, the quantity of groundwater to be used for the project and within the cumulative impact area compared to the quantity of available groundwater indicates that combined project contributions are not anticipated to rise to a cumulatively considerable level.

The combined project contributions are not anticipated to rise to a cumulatively considerable level.

**Significance Level:** Less than Significant with Mitigation Incorporated
c) **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

With implementation of the recommended mitigation measures identified in this IS/MND, the potential for project-related activities to cause substantial adverse effects on human beings would be reduced to less than significant levels.

**Significance Level:** Less than Significant with Mitigation Incorporated
References


5. PRMD, Sonoma County General Plan 2020 (as amended), September 23, 2008.


8. California Scenic Highway Mapping System, Sonoma County; 2011; California Department of Transportation.


15. Sonoma County. 2014. *Figure PS-1f, Wildland Fire Hazard Areas*. Adopted September 9, 2014.


20. County Fire Comments, Sonoma County Fire and Emergency Services, February 2018.


