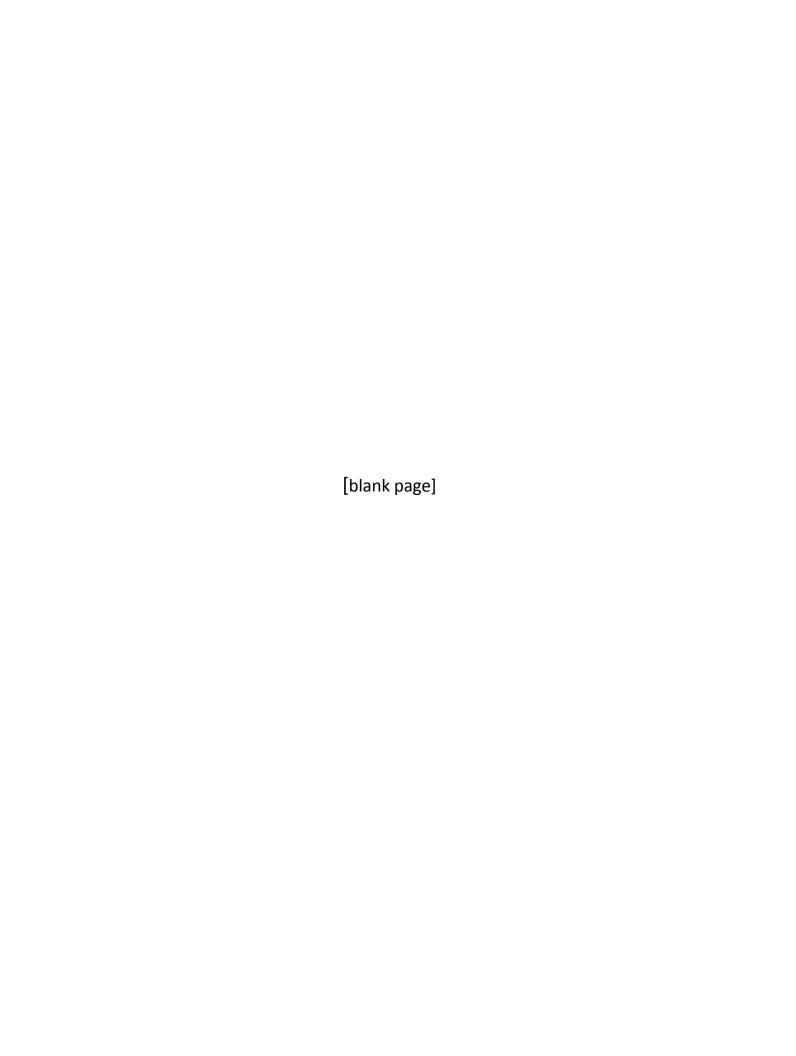
ATTACHMENT 5: Board of Zoning Adjustments Staff Report and Exhibits, April 11, 2019





Sonoma County Board of Zoning Adjustments STAFF REPORT

DATE: UPC17-0020 April 11, 2019 **TIME:** 2:20 pm

STAFF: Crystal Acker, Project Planner

Appeal Period: 10 calendar days

SUMMARY

<u>Applicant:</u> Petaluma Hills Farm, LLC., Samuel Magruder, Managing Member

Owner: Sonoma Hills Farm, LLC., Michael Harden, Managing Member

Location: 334 Purvine Road, Petaluma

APN: 022-230-020 Supervisorial District No.: 2

<u>Subject:</u> Cannabis Use Permit for Mixed Light, Indoor, and Outdoor Cultivation

PROPOSAL: Request for a Use Permit for a commercial cannabis operation, including

8,096 square feet of mixed light cultivation, 2,880 square feet of indoor cultivation, and 28,560 square feet of outdoor cultivation, for a total proposed cultivation canopy area of 39, 536 square feet (less than 1 acre/43,560 square feet). Accessory operations requested include 4,080 square feet of indoor propagation (less than 25% of cultivation canopy area), and processing of site-grown cannabis, consisting of trimming, drying, curing, weighing, and packaging. Project operations are proposed in new and

repurposed structures in the same portion of the 37.02-acre parcel where

farm development currently exists.

Environmental

<u>Determination</u>: Proposed Mitigated Negative Declaration

General Plan: Land Extensive Agriculture (LEA) 100-acre density

Specific/Area Plan: Petaluma Dairy Belt Area Plan: Land Extensive Agriculture

Zoning: Land Extensive Agriculture 100-acre density (LEA B6 100), Accessory Dwelling

Unit Exclusion (Z)



Land Conservation

Contract: Not Applicable

Ord. Reference: 26-06-020(t) – Land Extensive Agriculture Uses Permitted with a Use Permit;

26-88-250 – Commercial Cannabis Uses; 26-88-254 – Cannabis Cultivation-Commercial

Application Complete

for Processing: December 11, 2017

RECOMMENDATION: Recommend that the Board of Zoning Adjustments approve the request, with conditions, for a five-year limited term Conditional Use Permit for a commercial cannabis cultivation operation including 8,096 square feet of mixed light cultivation, 2,880 square feet of indoor cultivation, 28,560 square feet of outdoor cultivation, 4,080 square feet of indoor propagation, and associated processing of site-grown cannabis.

EXECUTIVE SUMMARY: Staff is recommending approval of the cannabis use permit application because:

- The proposed project is consistent with the General Plan because it supports ongoing agricultural activities, preserves the agricultural character of the area, and does not increase residential density of the area.
- The proposed project is consistent with the Petaluma Dairy Belt Area Plan because it supports ongoing agricultural uses, preserves the agricultural character of the area, and does not increase residential density of the area.
- The proposed project meets the development criteria of Sonoma County Cannabis
 Ordinance and will meet the operating standards of the Ordinance through compliance with recommended conditions of approval.
- Commercial cannabis cultivation and processing are allowed uses in the Land Extensive Agriculture zoning district.
- The design, location, size, and operating characteristics of the project are considered compatible with the agricultural zoning and surrounding land uses in the vicinity due to the large parcel size of the site (37.02 acres) and the ample distance between proposed cannabis cultivation sites and residential neighbors.
- The Site Security Plan for the project includes robust security measures which exceed requirements, has been reviewed by the Sonoma County Sheriff's Office, and has received a positive evaluation from the County Sheriff.

ANALYSIS

Background:

<u>Regulations</u>. In October 2015, the Governor signed three bills into law collectively known as the Medical Cannabis Regulations and Safety Act establishing the State's first licensing system for commercial medical cannabis activity.

In November 2016, California voters approved Proposition 64, legalizing the adult use and possession of cannabis.

On December 20, 2016, the Sonoma County Board of Supervisors adopted the Cannabis Ordinance (No. 6189) to establish a comprehensive local program to permit and regulate medical cannabis to align with State Regulations. The ordinance was intended to preserve environmental resources, protect the health and safety of communities, and ensure the industry contributes positively to the economic vitality of the County.

In June 2017, the Governor signed a bill creating a single regulatory scheme for both medical and adult use cannabis businesses.

On October 16, 2018, the Sonoma County Board of Supervisors adopted an amendment to the Cannabis Ordinance (No. 6245), extending the maximum term of cannabis use permit from one year to five years, authorizing adult use in addition to medical with a use permit, increasing minimum parcel size in agricultural and resource zones, allowing non-flowering propagation up to 25% of the permitted cultivation area with a use permit, and clarifying a number of additional items, such as setbacks and definitions.

<u>Application Processing</u>. On August 16, 2017, a Use Permit application was submitted for Cultivation (mixed Light, Indoor, and Outdoor), and associated Processing. The applicant did not enroll in the penalty relief program; no commercial cannabis is currently grown on the site.

On August 24, 2017, Permit Sonoma sent notification of the proposed project to neighboring properties within 300 feet of the parcel boundaries. A number of public comments with concerns regarding the project have been received since the early notification letter was sent out. These letters are part of the administrative record and have been attached to this Staff Report for reference (Exhibit C).

On September 5, 2017, an initial site inspection was performed by County staff.

On December 11, 2017, the application was deemed complete for processing.

On December 3, 2018, the application was amended to request a 5-year permit term, adult use, and indoor propagation.

On December 14, 2018, another site visit was performed by County staff.

On March 11, 2019, a draft Initial Study/Mitigated Negative Declaration was published for public review and submitted to the State Clearinghouse for State Agency review (SCH Number 2019039068). The public review period is 30 days, from March 11-April 11.

On March 11, 2019, Permit Sonoma sent notification of the hearing date and availability of the Mitigated Negative Declaration to neighboring properties within 1,000 feet of the parcel boundaries, and to all members of the public who had previously requested notice as an "interested party." A number of public comments with concerns regarding the project have been received in response to the hearing notification and Mitigated Negative Declaration review period. These letters are part of the administrative record and have been attached to this Staff Report for reference (Exhibit C).

On March 11, 2019, two public hearing signs were installed on the Purvine Road frontage on the proposed project site.

Project Description:

Project Overview

Petaluma Hills Farm, LLC., proposes a commercial cannabis operation within a new 15,353 square foot building including 8,096 square feet of mixed light canopy (Type 2B state license), 2,880 square feet of indoor canopy (Type 1A state license), and 4,080 square feet of indoor non-flowering propagation, for a total cultivation canopy area of 39, 536 square feet (less than 1 acre/43,560 square feet). The operation would also include 28,560 square feet of outdoor cultivation (Type 3 state license). The applicant is not participating in the penalty relief program; no commercial cannabis is currently grown on the site.

On-site processing of site-grown cannabis is also proposed consisting of trimming, drying, curing, weighing, and packaging. Proposed hours of operation for cultivation, indoor processing, and outdoor harvesting are 24 hours per day, seven days per week, as needed. Outdoor cultivation will only take place for 5-6 months per year during the growing season, and all outdoor cultivation activities, with the exception of harvest, would be limited to daytime hours. Deliveries and shipping would be limited to 8:00 am to 5:00 pm Monday through Friday. The cannabis operation would have a maximum of 10 employees, including 2 full-time security guards, an on-site manager, and up to 7 cultivation, processing, and harvest employees. The operation will not be open to the public.

Existing cattle grazing on 25 acres and 1-acre chef's garden operations would continue, independently from the cannabis operation (See Site Characteristics below for more description of existing operations not associated with the requested use permit).

All structures would be located in approximately the same footprints as existing or previous structures within the developed interior portion of the parcel. The majority of the land (over 25

acres) would remain as open pastureland to support cattle grazing. The outdoor cultivation area would be located where the previous poultry barns were. The indoor/greenhouse cultivation building would be located where the former dairy barn was located. The drying barn would be located in place of the former hay barn, and all other operations would take place in repurposed existing buildings. Therefore, the overall level of structural development would be similar to the existing condition. Refer to proposed Site Plan (Exhibit B - Figure 1), and the proposed Cultivation Floor Plan (Exhibit B - Figure 5). Identification codes below (e.g., P1), correspond to the Site Plan.

Cultivation and Processing Facilities

The following three structures are the only buildings where cannabis would be present at any time during the proposed operation. Each of these buildings would have a security system installed, including security lighting and cameras, and controlled access by key card or digital code, protected by an alarm system.

The <u>new 15,343-square-foot greenhouse (P1) and indoor cultivation (P7) building</u> would consist of a corrugated metal building with metal framing and solid walls on a concrete slab foundation.

The mixed light greenhouse portion of the building would have a frosted refracted glass paned gabled roof with retractable curtains and would contain four greenhouse bays. The roof curtains would be designed to fully contain the light and ensure that no light escapes between sunset and sunrise or would be visible from neighboring properties. Flowering cannabis plants in the greenhouse would be grown in soil medium in containers in a single level. The entire greenhouse portion of the building would be used for flowering cultivation, approximately 8,096 square feet of flowering canopy.

The indoor portion would have a solid gabled roof instead of glass, and would be the same width as two greenhouse bays. One bay would contain flowering cannabis plants in a 3-tiered mobile racking system totaling about 2,880 square feet of flowering canopy. The other bay would contain approximately 4,080 square feet of non-flowering canopy in two propagation rooms for mothers and vegetative plants, also using 3-tiered mobile racking systems. Mobile racks maximize cultivation space so that less walkway space is needed for cultivators to reach all plants. One full-width aisle is provided along one side and at the end of each cultivation room when all the racks are pushed together. When the end rack is pushed against the end wall, it creates a new aisle between the adjacent racks. Each additional rack can move along a track to provide a new aisle until reaching the opposite wall. Plants would be grown in soil medium in trays or containers. The indoor facility would also include non-cultivation areas, including a harvest room and changing room.

Soil would be delivered to the site, as needed. Used soil would be composted along with cannabis green waste and re-used in the operation. Irrigation and application of fertilizer and growth

amendments would occur using timer/sensor-driven drip irrigation. A perimeter fence (see below under Fencing for more details) would be constructed around the greenhouse/indoor structure and additional outdoor area designated for cannabis green waste composting and soil reclamation processes to provide security and screen the operations from view.

The <u>new 3,611-square-foot drying barn (P8)</u> would be constructed of wood framing and wood siding on a concrete foundation in the same footprint as the old hay barn (B8). The new barn would be approximately the same height as the former, consisting of a ground floor and partial second floor/central loft area. Walls would be clad with salvaged barn wood from the original barn to maintain the agrarian character, and the barn roof would be gabled to match the look of the original barn. Drying of site-grown cannabis is the only processing activity that would occur in the barn. The structure would include a separate room to house hazardous materials, such as fertilizers, and additional non-cannabis storage would occur on the second floor. No cultivation would occur in the structure.

The <u>repurposed 1,440-square-foot concrete block packaging and inventory storage building</u> (B3/P10) would require framing/structural improvements to meet current building code. Interior improvements and installation of a security system and secure temperature-controlled storage are also proposed. Processing activities, including trimming, curing, and weighing of cannabis, would occur in this structure and be limited to cannabis grown on-site; no importation of off-site cannabis would be allowed. Packaging and short-term storage of products prior to transfer to a licensed and permitted distributor would also occur in this structure. The structure would be equipped with a roll-up door for secure loading of cannabis products. Transport vehicles would pull inside the secure loading fence immediately outside the rollup door, and loading would occur inside the fence with the fence gates closed. No cultivation would occur in the structure.

Odor and Climate Control

The indoor cultivation and mixed light greenhouse building would be equipped with a self-contained, closed-loop climate control and air filtration system. All cultivation rooms would contain carbon filters and multiple fans to diminish cannabis odor. Carbon filters pull odor out of the air and neutralize odors that pass through the room. Additionally, carbon filters can filter out mold and mildew spores. Odor inspections are proposed to be conducted daily by the on-site manager. Inspections would include verifying that all filtration equipment is functioning properly, checking that filters have been replaced on schedule, and would include a walking tour through the interior and around the exterior of each cannabis-containing facility to document any noticeable odor (indoor cultivation/greenhouse, and both processing buildings).

The odor filtration system would function in tandem with the climate control system. Air would be continually conditioned and re-circulated around the building interior by blowers to maintain the exact desired temperature and humidity at all times, year-round. The only exterior component of the system is the chiller unit, which would be ground mounted on a concrete pad outside the

cultivation building on the east (property interior) side. Processing buildings would have similar closed loop climate control and carbon filter systems, but with smaller residential HVAC units, instead of a commercial chiller.

Lighting and Energy Use

Indoor and greenhouse lighting would consist of liquid-cooled LED horticultural lights, which are extremely efficient and can reduce facility energy costs by up to 70% over traditional high pressure sodium (HPS) grow lights. The liquid cooling is a closed loop system which pulls heat away during the hot summer months and recirculates it through the facility during winter to reduce both heating and cooling needs and increase both water and energy efficiency. The applicant is currently enrolled in the Sonoma Clean Power EverGreen program to satisfy the requirement of the cannabis ordinance that all energy use must be 100 percent renewable.

Outdoor Cultivation

Outdoor cannabis (P9) would be cultivated in a 28,560-square-foot area in the former location of the poultry barns. Outdoor cultivation would occur during the May to October outdoor growing season with one harvest conducted, typically in late October. Plants would be cultivated in-ground with dry-farming techniques and be irrigated on a limited basis by timer/sensor-driven drip irrigation to limit water use and prevent surface runoff. A perimeter fence (see below under Fencing for more details) would be constructed around the entire outdoor cultivation site to provide security, screen the site from view, and provide a deflection windbreak for odor management.

No engineered odor control system is required by the cannabis ordinance for outdoor cultivation. However, the cultivation site is proposed near the center of the parcel in a location greater than 200 feet away from the nearest property boundary and greater than 600 feet away from the nearest off-site residence to limit potential for off-site odors.

Support Facilities

Support facilities would be used by staff in the proposed operation, but would not contain cannabis at any stage of the commercial process.

The existing residence (B10) (currently under rental) would be used to house the on-site manager and his or her family. No changes to the house are proposed.

The existing 792-square-foot detached garage (B9) contains a small office space which would be enlarged and improved to accommodate a security office and an additional office. The remaining portion of the garage would continue to serve as parking and storage for the primary residence.

The existing 901-square-foot accessory dwelling unit (B11) would be converted to an office/employee break room with an Americans with Disabilities Act (ADA) accessible restroom, and additional non-cannabis storage.

Fencing and Landscaping

Security fencing would be installed around the outdoor cultivation area and around the greenhouse/ indoor cultivation building, including a designated cannabis green waste composting/soil reclamation area. Fencing would include security lighting and cameras, and controlled access by key card or digital code, protected by an alarm system. Proposed fencing would consist of 7-foot-tall chain link and green plastic slat with 3 rows of barbed wire on the top (8 feet total height).

Proposed landscaping in front of the fence would consist of rose bushes planted along the fence on exterior sides (facing Purvine Road & neighbors to the southwest). Drought-tolerant, fire-resistant, trees and shrubs would then be planted in front of the roses.

A new 8-foot wood fence was also recently constructed between the project property and their neighbors to the southwest, at the neighbor's request. No permit is required for this type of fence in agricultural zoning.

Driveway, Access, and Parking Improvements

The existing driveway entrance would be widened to 24 feet and an electronic security gate would be installed a minimum of 30 feet back from Purvine Road. The remaining driveway would be widened to 20 feet in the property interior and would be paved to the security office. Remaining access roads would be improved gravel or dirt. A fire truck turnaround would be constructed to the west of the greenhouse/ indoor perimeter fence. The improvements would widen and improve the angle for access to the driveway and would be done at the same time as the grading for the new buildings.

A gate camera/intercom system would be installed to communicate with the security office (B9) and control site access. All staff, all vendors, and all visitors would be required to check in with security staff prior to entering the gate.

Ten parking spaces would be provided, including four accessible parking spaces compliant with ADA Standards for Accessible Design. One accessible space would be located at each building (greenhouse/indoor cultivation complex, security office, one at each processing building).

Water Supply

An existing domestic water well is located in a pump house (B12) on the northwest portion of the site. In addition, two shallow "hand dug" water wells are present, one located approximately 220

feet south of the domestic well and the other located approximately 370 hundred feet south of the domestic well. These shallow wells were likely dug associated with previous ranching operations to supplement watering for livestock; however, they are not proposed for use in the cannabis operation or included in water supply calculations for any of the proposed or existing uses.

A rainwater harvesting system would also be installed to capture up to 40,000 gallons from the greenhouse/indoor cultivation building roof. The rainwater would be filtered and used to supplement cultivation irrigation. In addition, greywater would be captured from the handwashing sink in the indoor building and from bioswales constructed downslope of the greenhouse/indoor cultivation complex and used only to supplement irrigation of perimeter fence landscaping.

<u>Water Storage Tanks:</u> Four 10,000-gallon rainwater collection tanks (P3) would be installed for irrigation (40,000 gallons total). Three additional irrigation tanks (two 10,000-gallon; one 5,000-gallon) would be connected to the existing well pump house and filled with well water (25,000 gallons total).

Two 5,000-gallon tanks would be installed for fire suppression (10,000 gallons total), also filled with well water. A 1,500-gallon graywater tank would be installed and used only to supplement irrigation of the fence landscaping around the greenhouse/indoor cultivation complex. Two existing 2,500-gallon well water storage tanks are present near the existing well house.

Solid Waste and Wastewater Disposal

All cannabis plant waste and all used soil or other cultivation planting mediums would be collected in a dedicated secured waste area (P2), and composted for reuse in the cultivation operation. Cannabis green waste would be ground up in a small wood chipper and mixed with soil and/or mulch prior to composting.

A covered solid waste enclosure for non-cannabis waste only (P5) would be constructed south of the concrete block processing building (B3, P10).

Domestic wastewater disposal would be via the two existing septic systems, one 1,200-gallon system for the primary residence (B10) and one estimated 650 gallon tank for the granny unit conversion to an ADA compliant restroom and employee office/break room (B11/P11).

Construction

Project construction is anticipated to occur over 6-8 months, with work hours from 7:00 am to 7:00 pm Monday – Saturday as weather permits, and no construction grading or heavy construction during holidays. Construction would begin with site preparation, including clearing and grubbing to provide a relatively flat surface and remove old foundations and building debris within the project area. Rough grading activities would include building pad preparation and grading of roads and

walkways to elevations shown on final improvement plans, and installation of sediment and erosion control features. Concrete slab foundations for the new greenhouse/indoor cultivation facility and new drying barn would be constructed next, followed by vertical construction of new buildings, and remodeling/interior improvements to existing buildings. The final phase would include finished hardscapes, installation of fencing, landscaping, and water storage/irrigation systems. A variety of construction equipment would likely be used, including an excavator, bulldozer, backhoe, grader, cement mixers, pavers, and other general construction equipment.

The proposed earthwork would balance on site and would not require import or export of soil. Additional crushed rock for road base and a base for the building slabs would be brought on site with dump trucks. Appropriate Best Management Practices, including dust control, would be implemented throughout construction, as needed.

Site Characteristics:

The parcel is 37.02 acres in size, and is located in an unincorporated, rural agricultural area in the Petaluma Dairy Belt of southwest Sonoma County, approximately 4.5 miles west of the City of Petaluma, about 3 miles southeast of Two Rock, and about 2 miles northeast of the Sonoma County-Marin County border (Exhibit B – Figure 3). The U.S. Coast Guard Training Center is about 1.5 miles to the west. Laguna Lake is approximately 1.5 miles to the south, and Stemple Creek is about 2 miles to the northwest. Surrounding parcels are generally large agricultural properties. The parcel is accessed from Purvine Road, a public County road via either Spring Hill Road or Middle Two Rock Road (Exhibit B – Figure 4).

Existing structural development occurs mostly in the center of the parcel, including one primary residence, one 901 square foot accessory dwelling unit, a detached garage, three barns, a storage shed, and a well pump house. There is an existing domestic water well and two existing septic systems, serving the main house and accessory dwelling unit. The entrance to the property is a dirt/gravel driveway. In 2016, a recorded lot line adjustment created the current Assessor's Parcel Number (APN) for the property; prior to this it was part of APN 022-230-018. The parcel is not part of a subdivision. The nearest off-site residence is about 600 feet away from the proposed outdoor cannabis cultivation location.

There are existing trees on the property, primarily a row of eucalyptus along the Purvine Road frontage and a few other species (e.g., coast live oak, Monterey pine, coast redwood, fan palm) planted around the residential structures. A few remnant orchard trees are present southwest of the farm buildings (cherry, apple, and grapefruit). However, most of the site consists of gently sloping, open pastureland vegetated by non-native annual grassland, which is common to heavily grazed areas.

Site drainage occurs by overland flow to the southwest. Site elevation ranges from 320 feet MSL at the eastern end to 240 feet MSL at the southwestern corner. There are no waterways or wetland features on the parcel. 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 3 miles to the northeast.

The General Plan Land Use Designation on the parcel is Land Extensive Agriculture 100-acre density. The site is also designated Land Extensive Agriculture by the Petaluma Dairy Belt Area Plan. The project is not located on a bikeway or closer than two miles to an existing or proposed bikeway. The closest proposed Class II bikeway is Bodega Ave to the north.

The parcel is not under a Land Conservation Act Contract (Williamson Act). The project site is mapped as Farmland of Local Importance, which not a category designated as Important Farmland by the state Farmland Mapping and Monitoring Program.

Existing Agricultural Operations

Approximately 25 acres of pastureland (about 68% of the total land area) is leased for grazing, which will continue separately from the proposed cannabis operation.

An approximately 1-acre area in the western corner of the property along Purvine Road is leased to SHF Jugo, Inc., as an organic chef's garden. The lease includes use of an existing barn (B2) and storage structure (B7). The garden operation raises and sells organic produce by contract direct to restaurants. One head farmer runs the operation with 2-4 seasonal employees to help during planting and harvest. This operation will continue separately from the proposed cannabis operation.

Refer to the Premise Map (Exhibit B – Figure 2) for locations of each operation/leasehold located on the parcel.

Surrounding Land Use and Zoning:

This area is largely rural, located in the hills west of Petaluma. Surrounding parcels to the subject site are zoned Land Extensive Agriculture, with a density of 100 acres per dwelling unit (LEA-100) or 60 acres per dwelling unit (LEA-60). Surrounding land uses are predominantly pasture land, dairy and poultry farms, horse and canine facilities, and rural residential development. Uses on the adjacent agricultural properties include a dairy to the northwest (McClelland's Dairy), grazing land and a residence to the east (about 750 feet away from the proposed greenhouse), undeveloped grazing land to the south, and a residence to the southwest (about 600 feet away from the proposed outdoor cultivation area). Nearby commercial operations include McClelland's Dairy, Reichardt Duck Farm, Spring Hill Cheese, Two Rock Dog Ranch, and the Great Peter Pumpkin Patch.

DISCUSSION OF ISSUES

Issue #1: General Plan Consistency

The subject property has a General Plan Land Use designation of Land Extensive Agriculture, which is intended to ensure the stability and productivity of the County's agricultural lands and industries, specifically by enhancing and protecting lands capable of and generally used for animal husbandry and the production of food, fiber, and plant materials. Section 2.6 of the General Plan Land Use element identifies the intended policy and permitted uses for Land Extensive Agriculture areas. This land use designation is intended to establish and maintain densities and parcel sizes that are conducive to continued agricultural production.

In adopting the Cannabis Ordinance, the Sonoma County Board of Supervisors determined that cannabis uses (including cultivation and processing) are consistent with the overall goals, objectives, policies, and programs of the Sonoma County General Plan pursuant to Ordinance No. 6189 Section I. Findings. U. By requiring a conditional use permit for cannabis cultivation in the Land Extensive Agriculture zone, the goals of protecting agricultural production can be examined on a case-by-case basis. The Sonoma County Board of Supervisors passed Ordinance No. 6189 on December 20, 2016.

Staff Comments:

In adopting Ordinance No. 6189, the Board of Supervisors concluded that cannabis cultivation and processing may be permitted within the Land Extensive Agriculture land use designation provided the project is consistent with the overall goals, objectives, policies, and programs of the Sonoma County General Plan. Although cannabis is not defined as an agricultural crop under County Code, it is classified as an agricultural product, and cannabis cultivation is an allowed use in agricultural zoning with Use Permit or Zoning Permit approval. The proposed project will disturb a relatively small portion of the 37-acre property, and much of the development is occurring in previously disturbed areas within the developed interior portion of the parcel. The density of the parcel size will remain unchanged. There is no proposal to provide additional services, such as public sewer or water, which might facilitate more intensive development away from agricultural industries or result in further encumbrance of agricultural lands.

Cattle grazing and a commercial organic garden are two current agricultural uses of the property; these uses are proposed to continue in addition to the cannabis cultivation. Although the proposed greenhouse is intended for cannabis cultivation, greenhouses are generally agricultural in nature, and would not be out of place in the LEA district. The project would preserve the natural, visual, and scenic resources of the site, avoid urban development of the site, and would result in the use of existing property consistent with General Plan Objectives LU-9.1, -9.3, -9.4, -19.1, -19.2, -19.4 and AR-4.1, as well as the policies for the Land Extensive Agriculture Areas.

Issue #2: Petaluma Dairy Belt Area Plan Consistency

The site's Petaluma Dairy Belt Area Plan land use designation is Land Extensive Agriculture. This includes lands characterized predominantly by dairies, sheep and cattle ranches, grazing, silage, and related activities. Residences are mostly related to the agricultural economy and include single family homes, mobile homes, and farm labor housing. A density range of one dwelling per 60-160 acres is used for this category to reflect the existing parcel pattern, discourage incompatible higher density residential use, and maintain large areas for extensive agricultural operations. Furthermore, the primary emphasis in Land Extensive Agriculture designated properties is to promote, protect, and preserve agricultural land uses.

Priorities of the Petaluma Dairy Belt Area Plan are as follows: to preserve and enhance the agricultural resources and protect the agricultural industry; to preserve the area's scenic beauty; to accommodate a variety of rural lifestyles; and to encourage the development of an adequate transportation network which will accommodate proposed development and projected travel needs, and which will facilitate movement of agricultural products to the market place. Major policies of the Petaluma Dairy Belt Area Plan involve: mitigating for increased residential densities; adopting Scenic Design zoning along Highway 116 (Gravenstein Highway), Stony Point Road and U.S. 101; and limiting conflicts with agricultural activities.

Staff Comments:

The project would continue to support agriculture uses and does not increase residential density of the area. Although cannabis is not defined as an agricultural crop under County Code, it is classified as an agricultural product. Cattle grazing and a commercial organic garden are two current agricultural uses of the property; these uses are proposed to continue in addition to the cannabis cultivation. A row of eucalyptus trees along Purvine Road partially screens the proposed outdoor cultivation location; additional vegetation will be planted to screen the outdoor cultivation location and the proposed new cultivation building. The proposed greenhouse/indoor cultivation building will be constructed in a style similar to other agricultural buildings in the area, and the proposed new drying barn will use salvaged barn lumber as siding to maintain some of the aesthetic characteristics. The site is not located in a Scenic Resource area or along the scenic corridors identified in the Petaluma Dairy Belt Area Plan. There will be no increase in residential density; there is no proposal to provide additional services, such as public sewer or water, which might facilitate more intensive development away from agricultural industries or result in further encumbrance of agricultural lands. The proposed project does not conflict with other surrounding agricultural activities. Therefore, the proposed project does not conflict with area plan policies.

Issue #3: Zoning Consistency

I) Cannabis Ordinance No. 6189 and Ordinance No. 6245-

Commercial cannabis cultivation is an allowed use in the Land Extensive Agriculture (LEA) zoning district pursuant to Sonoma County Code 26-88-250 through 26-88-254, which was adopted on December 20, 2016 (No. 6189), and amended on October 16, 2018 (No. 6245). The applicant requests a conditional use permit for a commercial cannabis operation including outdoor, mixed light, and indoor cultivation, with associated propagation and processing of site-grown cannabis. Pursuant to Ordinance development criteria and permit requirements in the LEA zoning district:

- 1) The minimum parcel size cannot be less than 10 acres;
- 2) Indoor cannabis cultivation cannot exceed 5,000 square feet of cultivation area (Specialty Indoor) per parcel;
- 3) Mixed light cannabis cultivation cannot exceed 10,000 square feet of cultivation area (Small Mixed Light) per parcel;
- 4) Outdoor cannabis cultivation cannot exceed 43,560 square feet (1 acre) of cultivation area (Medium Outdoor) per parcel;
- 5) The combined total of all cannabis cultivation areas cannot exceed 43,560 square feet (1 acre) per parcel;
- 6) Propagation area cannot exceed 25 percent of the permitted cultivation area and must be located in a separate area from flowering plants;
- 7) Associated processing is limited to on-site cultivation only; and
- 8) The total combined cultivation area within the County cannot exceed 43,560 square feet (1 acre) for any cannabis business owner.

Staff Comments:

The request complies with Ordinance requirements listed above in that the proposed use involves:

- 1) Operation on a 37.02-acre parcel;
- 2) 2,880 square feet of indoor cultivation area;
- 3) 8,096 square feet of mixed light cultivation area;
- 4) 28,560 sq ft of outdoor cultivation area;
- 5) A total cultivation area of 39,536 square feet for the project parcel;
- 6) 4,080 square feet of non-flowering propagation (the 25% limit = 9,884 square feet) located in a separate room in the indoor structure;
- 7) Processing of only site-grown plants; and
- 8) There are three managing members of Petaluma Hills Farm, LLC.: Samuel Magruder, Michael Harden, and Gian Paolo Veronese. There are two managing members of Sonoma Hills Farm, LLC.: Michael Harden and Samuel Magruder. None of these individuals or businesses hold or have applied for permits for other commercial cannabis operations in the County.

II) Setbacks -

Cannabis cultivation operations for commercial use must be compliant with the development criteria and operating standards within Section 26-88-254 (Cannabis Cultivation – Commercial) of the Zoning Code. Included within the above referenced development criteria are the following property setback standards applicable to the LEA zoning district:

Property Setbacks – Outdoor. Outdoor cultivation areas and all structures associated with the cultivation shall not be located in the front yard setback area and shall be screened from public view. Outdoor cultivation areas shall not be visible from a public right of way. Outdoor cultivation areas shall be setback a minimum of one hundred feet (100') from property lines and a minimum of three hundred feet (300') from residences and business structures on surrounding properties. Outdoor cultivation sites shall be setback a minimum of one thousand feet (1,000') from a school providing education to K-12 grades, a public park, childcare centers, or an alcohol or drug treatment facility. The distance shall be measured in a straight line from the property line of the protected site to the closest property line of the parcel with the cannabis cultivation use. This park setback may be reduced with a use permit when it is determined that an actual physical equivalent separation exists due to topography, vegetation or slope, that no offsite impacts will occur, and that the cannabis operation is not accessible or visible from the park (Sec. 26-88-254(f)(6)).

Property Setbacks – Indoor. All structures used for indoor cultivation shall comply with the setbacks for the base zone and any applicable combining zone. Structures associated with cultivation shall not be located in the front yard setback area and shall be screened from public view. There shall be no exterior evidence of cultivation either within or outside the structure. Indoor cultivation within agricultural and resource zones shall be setback a minimum of six hundred feet (600') from a school providing education to K-12 grades. The distance shall be measured in a straight line from the property line of the protected site to the closest property line of the parcel with the cannabis cultivation use

(Sec. 26-88-254(f)(7)).

Property Setbacks – Mixed Light. Mixed light structures shall be setback a minimum of one hundred feet (100') from property lines and a minimum of three hundred feet (300') from residences and business structures on surrounding properties in agricultural and resource zones. Mixed light structures in all zones shall be setback a minimum of one thousand feet (1,000') from a school providing education to K-12 grades, a public park, childcare center, or an alcohol or drug treatment facility. The distance shall be measured in a straight line from the property line of the protected site to the closest property line of the parcel with the cannabis cultivation use. This park setback may be reduced with a use permit when it is determined that an actual physical equivalent separation exists due to topography, vegetation or slope, that no offsite impacts will occur, and that the cannabis operation is not accessible or visible from the park (Sec. 26-88-254(f)(8)).

Staff Comments:

Based on Geographic Information System measurements of aerial imagery, site plans, and field inspections, the proposed mixed light/indoor cultivation building is greater than 200 feet from the nearest property line, and approximately 750 feet away from the nearest off-site residence. The outdoor cultivation area is about 600 feet away from the nearest off-site residence, and is also greater than 200 feet away from the nearest property line. The subject property is over 3 miles from any park, school/childcare center, or rehab center.

Cultivation areas will be screened from public view with various trees and other vegetation types. As mentioned earlier in this report, the application proposes extensive landscaping to screen the cultivation structure and the outdoor cultivation area in order to minimize visibility from Purvine Road and Spring Hill Road.

The proposed operation exceeds all setbacks and complies with public screening requirements.

Issue #4: Environmental Determination

The proposed project has been analyzed under the California Environmental Quality Act (CEQA) and the CEQA Guidelines, California Code of Regulations. Staff has determined that the project is subject to the California Environmental Quality Act. Based on application materials provided by the applicant and technical specialists, an Initial Study was completed.

As a result of the Initial Study, it was determined that project impacts could be mitigated to a less than significant level, and so a Mitigated Negative Declaration was drafted for the project. This document identifies mitigation measures and a monitoring program for the proposed project. The following table lists subsections of the Initial Study that may be potentially impacted by this project. Mitigation measures for these potential impacts are detailed in the Mitigated Negative Declaration, and have been incorporated into the conditions of approval.

The environmental factors checked below in the "Yes" column would be potentially affected by this project, but have been determined to be "Less than Significant with Mitigation" as indicated in the Initial Study for the project.

Topic Area	Abbreviation*	Yes	No
Aesthetic/Visual	VIS		No
Agricultural & Forest Resources	AG		No
Air Quality	AIR	Yes	
Biological Resources	BIO	Yes	
Cultural Resources	CUL	Yes	
Geology and Soils	GEO		No

Topic Area	Abbreviation*	Yes	No
Greenhouse Gas Emission	GHG		No
Hazards and Hazardous Materials	HAZ		No
Hydrology and Water Quality	HYDRO		No
Land Use and Planning	LU		No
Mineral Resources	MIN		No
Noise	NOISE	Yes	
Population and Housing	POP		No
Public Services	PS		No
Recreation	REC		No
Transportation and Traffic	TRANS		No
Utility and Service Systems	UTL		No
Mandatory Findings of Significance			No

For more detailed analysis and the prescribed mitigation measures for the topic areas that may have impacts that are "Potentially Significant" or "Less than Significant with Mitigation", please refer to the corresponding sections of the CEQA Initial Study (Mitigated Negative Declaration) for the project:

Section 3. Air Quality: pages 18-24

Section 4. Biological Resources: pages 24-30 Section 5. Cultural Resources: pages 30-34

Section 12. Noise: pages 50-54

Issue #5: Odor

Indoor and Mixed Light Structures

Odor is discussed in the Air Quality section of the Initial Study. Cannabis cultivation operations for commercial use must be compliant with the following Operating Standard:

All indoor 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 (Sec. 26-88-254(g)(2)).

Staff Comments:

All cultivation and processing structures include self-contained, closed-loop climate control systems, including carbon filtration to clean the air and control odor. Daily inspections are required to be performed and recorded in a daily log by the on-site manager. Inspections will include verifying that all filtration equipment is functioning properly, checking that filters have been

replaced on schedule, and will include a walking tour through the interior and around the exterior of each cannabis-containing structure to document any noticeable odor (indoor cultivation/greenhouse building, and both processing buildings).

The project incorporates required odor control filtration systems, which complies with the Operating Standard. Daily inspections and reporting are required to ensure that the system is working adequately to control off-site odors.

Outdoor Cultivation Area

Outdoor cannabis cultivation would be conducted in a 28,560-square-foot area during the May to October outdoor growing season with one harvest conducted, typically in late October. Cannabis plants start to emit odors about 3-5 weeks into the flowering period, generally starting in August or September and continuing until harvest in October.

The Cannabis Ordinance does not require an odor control system for outdoor cultivation. However, cannabis cultivation operations must be compliant with the following Health and Safety requirement:

Commercial cannabis activity shall not create a public nuisance or adversely affect the health or safety of the nearby residents or businesses by creating dust, light, glare, heat, noise, noxious gases, odor, smoke, traffic, vibration, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, runoff or wastes (Sec. 26-88-250(f)).

Staff Comments:

Generally, odors dissipate with distance from the source and opposite the primary direction of the odor flow. A minimum parcel size of 10 acres is required for all outdoor cultivation. Minimum setback distances are also required (300 feet from residences and businesses and 1,000 feet from schools, parks and other sensitive uses) to facilitate odor dissipation by distance.

Surrounding an odor-generating land use with a vegetated windbreak has been a successful strategy to reduce odor impacts for poultry and swine operations (Lin et al. 2006; USDA NRCS 2007). The windbreak strategy is most effective when parcels are large (at least 10 acres) and land uses are far apart, maximizing odor dissipation with distance between uses. Odor plumes generally travel along the ground in the direction of the prevailing winds. However, tree and shrub windbreaks have been found to deflect the odor plume above the vegetation layer where it is mixed with the prevailing winds to dilute the odor and diffuse it into the atmosphere (Lin et al. 2006; USDA NRCS 2007). Windbreaks were found to be more effective when densely planted, located closer to the odor source, and when composed of coniferous trees (Lin et al. 2006). Higher air temperatures resulted in greater odor dispersal over a shorter distance (Lin et al. 2006). Additional benefits of planted windbreaks include visual screening, noise reduction, and providing

food, shelter and overwintering habitat for birds and beneficial invertebrates, such as insect predators and native pollinators (USDA NRCS 2007 and 2014).

The prevailing wind direction during August-October is from the coast- west to east. Most of the parcels to the east are large agricultural parcels without residences; however, there are four parcels with residences within one half mile of the cultivation site in a general easterly direction. The approximate distance between the outdoor grow site and the nearest residence to the east or northeast is about 850 feet away. The next three residences are approximately 1,250, 1,500, and 2,300 feet from the outdoor cultivation site. Six additional residences occur within one half mile in other directions (a total of 10 residences identified within 0.5 mile from aerial imagery). The nearest residence overall is about 620 feet to the southwest of the outdoor cultivation site. This residence is opposite the prevailing wind direction and separated from the cultivation area by the cultivation site fencing and landscaping and by an additional 8-foot wood fence along the property boundary, all of which are expected to deflect and diffuse cannabis cultivation odors.

As noted above, an outdoor cannabis operation is not required to be odor free at all times to be operating lawfully, but rather, the odor must be contained in such a manner that it does not result in a public nuisance; public nuisance considerations include the strength, frequency, and duration of the odor from nearby residences and businesses. Some degree and duration of odor is to be expected from this agricultural product, particularly during the flowering period when terpenes are present; this impact was taken into consideration when cannabis zoning, minimum parcel sizes and setbacks were established.

The proposed outdoor cultivation operation is sited near the center of the parcel and exceeds ordinance requirements for minimum parcel size (10-acre minimum; 37-acre parcel) and setbacks (300-foot minimum from residences; project 600+feet from residences). Planted screening of the cultivation site will also occur. The landscape plan is subject to design review; the planting proposal will need to address both visual screening and odor management to be approved. Cannabis odors would be present during the hottest months of the year, when natural air convection is highest, further enhancing the odor management potential of planted windbreaks to deflect air and odors upwards to be mixed with prevailing winds and diluted.

The applicant has submitted an Odor Control Plan. A condition of approval has been added to implement this plan, and to require review of additional odor-reduction measures in the event that verified odor complaints are received.

Issue #6: Security

In adopting the Cannabis Ordinance, the Board of Supervisors found that security issues could be addressed through compliance with the Zoning Code Security and Fencing requirements:

A Site Security Plan shall be required. All Site Security Plans shall be held in a confidential file, exempt from disclosure as a public record pursuant to Government Code Section 6255(a). Security cameras shall be motion-sensor and be installed with capability to record activity beneath the canopy but shall not be visible from surrounding parcels and shall not be pointed at or recording activity on surrounding parcels. Surveillance video shall be kept for a minimum of 30 days. Video must use standard industry format to support criminal investigations. Lighting and alarms shall be installed to insure the safety of persons and to protect the premises from theft. All outdoor and mixed light cultivation sites shall be screened by non-invasive, fire resistant vegetation and fenced with locking gates with a Knox lock. No outdoor or mixed light cultivation sites located on parcels adjacent to public parks shall be visible from trails or pubic access points. Razor wire and similar fencing shall not be permitted. Weapons and firearms at the cultivation site are prohibited. Security measures shall be designed to ensure emergency access in compliance with fire safe standards. All structures used for cultivation shall have locking doors to prevent free access (Sec. 26-88-254(f)(21)).

Staff Comments:

A submitted Site Security Plan is reviewed and approved as part of a project. In order to make the security measures difficult to defeat, part of the security protocol requires security plans to remain confidential, although a generalized description of the plan is included below.

All cultivation sites will be bordered with security fencing and locking gates and screened with vegetation. A gate camera/intercom system will be installed at the site driveway entrance to communicate with the security office and control site access. A security guard will be on duty at all times, 24 hours per day. All staff, all vendors, and all visitors will be required to check in with security staff prior to entering the gate. All persons allowed on-site will be required to have a key card with a specific security clearance limiting access to specific areas. Each building used in the operation and the outdoor cultivation perimeter fence will include key card security at one or more locations to limit access. A security camera system will be implemented that will use standard industry format to record footage 24 hours per day that will be kept for at least thirty (30) days in a secured location. Security cameras will be set up in a fashion as to not be noticeable from/directed to surrounding neighbors. Proposed on-site security measures are robust and go above and beyond the security and fencing requirements detailed above. A condition of approval will limit the cash retained on this site to the minimum needed for daily operations, and will require that all cash be placed in a secure location (e.g., locked drawer, safe, or similar storage cabinet with a locking mechanism).

The Site Security Plan was discussed with and reviewed by the Sonoma County Sheriff's Office by the applicant. The Sheriff's Office has since submitted a letter to County staff (see Exhibit C - Agencies), signed by the Sheriff, stating:

"The Petaluma Hills Farm security plan clearly incorporated the most current and best practices for security as it relates to cannabis operators. I understand that for some, cannabis operations in Sonoma County continues to raise local opposition, however after reviewing Petaluma Hills Farm security plan, I do not have any objections to their proposal from a security/public safety point of view."

The Site Security Plan exceeds the Zoning Code security and fencing requirements, and has received a positive evaluation from the Sonoma County Sheriff's Office.

Issue #7: Neighborhood Compatibility

Findings on the design, location, size, and development and operating standards are used to evaluate the project's neighborhood compatibility. These findings are used to determine if the proposed project/use would be detrimental to the health, safety, peace, comfort, and general welfare of persons residing or working in the area. This determination does not require that there be an environmental impact to prove the project/use may be detrimental.

Staff Comments:

- The nearest residence is about 620 feet away from the proposed outdoor cannabis cultivation location; the next closest residence is about 850 feet away from the proposed greenhouse. Both of these distances exceed setback requirements.
- The proposed cultivation operation is appropriately scaled for the site; cultivation areas are less than allowed by the Ordinance and proposed structures and the outdoor cultivation area are located in the approximate footprint of existing or previous farm development.
- The mixed light/indoor cultivation area will be contained within a non-distinct, corrugated metal greenhouse, similar to other agriculture structures in the area. The building will be located in the space of a former dairy barn and will be partially screened by proposed vegetation. The drying barn will be located in the footprint of a former hay barn and will be clad with reclaimed wood salvaged from that barn. The outdoor cultivation area will be located in the footprint of two former poultry barns and will be screened by both existing trees and proposed vegetation.
- Access to and from the site will be controlled through a private security gate. As noted above, security measures are robust and will deter potential theft and other crime.
- Odor control and management meets all requirements of the Ordinance. Odor in the cultivation building will be controlled by using a closed-loop recirculating air system, carbon filter, and odor neutralizers. The outdoor cultivation area is sited near the center of the parcel and exceeds setback requirements. A windbreak/hedgerow will also be planted and maintained to help deflect any odor plume above the vegetation layer into the atmosphere where winds will dissipate any odors.

- Proposed lighting meets all requirements of the Ordinance. The greenhouse will have a
 paned glass roof with retractable curtains designed to fully contain the light between sunset
 and sunrise, and ensure no light from within the greenhouse is visible from neighboring
 properties. All exterior security lighting will be fully shielded and downward casting to
 prevent spillover into the night sky or onto adjacent properties.
- Traffic to and from the site is expected to be minimal: the traffic study expects an average of 31 trips per day, including 5 each during the morning and evening peak hours.

For these reasons, and compliance with all development criteria and operating standards of the Cannabis Ordinance, the project is compatible with the surrounding neighborhood.

Issue #7: Public Comment Letters

As of April 3, 2019, 65 comment letters (including emailed comments) have been received on the project (Exhibit C):

- 48 in response to the March 11, 2019, Hearing Notice and Mitigated Negative Declaration publication, including:
 - 2 agencies: California Department of Food and Agriculture and the Sonoma County Sheriff's Office;
 - 39 from the public citing concerns with the project or general opposition to cannabis or the cannabis ordinance;
 - o 6 from the public providing support for the project; and
 - 1 from the applicant documenting public outreach correspondence with neighbors and special interest groups.
- 17 in response to the August 24, 2017, early notification, or received between August 24, 2017, and March 11, 2019.

The California Department of Food and Agriculture runs the state CalCannabis licensing program and is a Responsible Agency under CEQA. They submitted a number of requests to help them satisfy their CEQA obligations related to potential future issuance of a state license.

The Sonoma County Sheriff's Office provided support for the project Site Security Plan.

Primary topics of concern raised by the public related to the proposed project include: groundwater use and quality, odor, safety, traffic and road conditions, preservation of rural agricultural character and structures, visual impacts (mostly related to proposed fencing and security improvements), and special events and tourism.

Many commenters mistakenly believe that a guard tower or guard station is proposed at the property entrance. No new security building is proposed. The security office, where security

personnel will be located to monitor the entrance gate camera, is proposed inside the existing detached garage.

It is also important to note that the Cannabis Ordnance does not allow any sort of special events or tourism related to cannabis. Such operations could not be approved, and have not been requested by the applicant.

STAFF RECOMMENDATION

Staff recommends approval of the Use Permit subject to Conditions of Approval.

FINDINGS FOR RECOMMENDED ACTION

- Based upon the information contained in the Initial Study included in the project file, it has been determined that there will be no significant environmental impacts resulting from this project, because mitigation measures have been incorporated into the project as Conditions of Approval. The Mitigated Negative Declaration has been completed in compliance with CEQA State and County guidelines, and the information contained therein has been reviewed and considered.
- 2. The proposed project is consistent with the General Plan land use designation and Policies related to the protection of agriculture and the rural character of the project environs. In adopting the Cannabis Ordinance (No. 6189 and No. 6245), the Board of Supervisors concluded that cannabis cultivation and processing may be permitted within the Land Extensive Agriculture land use designation subject to securing a Use Permit, provided the project is consistent with the overall goals, objectives, policies, and programs of the Sonoma County General Plan. The project is consistent with the General Plan because it does not increase residential development, preserves the rural character of the area, is compatible with and supportive of agricultural uses, conserves the majority of the site for future agriculture, and helps stabilize farm incomes. Conditions of approval limit construction and operational activities and require design review of new structures and landscape screening to ensure that the project will not detract from the rural character of the project site or vicinity.
- 3. The proposed project is consistent with the Petaluma Dairy Belt Area Plan because the project would continue to support agricultural uses and does not increase residential density of the area. Although cannabis is not defined as an agricultural crop under County Code, it is classified as an agricultural product. Cattle grazing and a commercial organic garden are two current agricultural uses of the property; these uses are proposed to continue in addition to the cannabis cultivation. A row of eucalyptus trees along Purvine Road partially screens the proposed outdoor cultivation location; additional vegetation will

be planted to screen the outdoor cultivation location and the proposed new cultivation building. The proposed greenhouse/indoor cultivation building will be constructed in a style similar to other agricultural buildings in the area, and the proposed new drying barn will use salvaged barn lumber as siding to maintain some of the aesthetic characteristics. The site is not located in a Scenic Resource area or along the scenic corridors identified in the Petaluma Dairy Belt Area Plan. There will be no increase in residential density; there is no proposal to provide additional services such as public sewer or water which might facilitate more intensive development away from agricultural industries or result in further encumbrance of agricultural lands. The proposed project does not conflict with other surrounding agricultural activities.

- 4. The proposed project is consistent with Land Extensive Agriculture (LEA) Zoning District, in that the proposed cannabis cultivation operation is allowed with approval of a Conditional Use Permit. The project proposes a use that is allowed by Use Permit, that complies with the development criteria and operating standards of the Cannabis Ordinance, and adheres to the operational requirements of the Zoning District within the Sonoma County Code. The project meets or exceeds all required setbacks, minimum lot size requirements, ownership, square foot limitations, and permitted development criteria. The project will implement a Site Security Plan, Fire Prevention Plan, Odor Control Plan, and Waste Management Plan, and is energy source compliant with the Sonoma County Code. The proposed cannabis operation and site improvements would disturb a small portion of the overall parcel, and most of these areas were previously developed. The project is consistent with the development standards and operating limitations for the Land Extensive Agriculture zoning.
- 5. The establishment, maintenance, or operation of the use for which application is made will not, under the circumstances of this particular case, be detrimental to the health, safety, peace, comfort, and general welfare of persons residing or working in the area of such use, nor be detrimental or injurious to property and improvements in the neighborhood or the general welfare of the area. The particular circumstances in this case are: (1) The cannabis operation would not involve more than one acre of cannabis cultivation area; 2) All cannabis cultivation areas are greater than 100 feet from property boundaries and greater than 300 feet from adjacent off-site residences; 3) The project parcel is greater than 10 acres (37.02-acres); 4) All cannabis cultivation areas will be screened from public view from Purvine Road and Spring Hill Road; 5) Security measures will be implemented to uphold the health, safety, peace, comfort, and general welfare of persons residing or working in the neighborhood of such use; 6) All equipment shall be in compliance with the General Plan Noise Standard; 7) Outdoor cultivation activities (except for harvest) will be limited to daylight hours. Deliveries and shipping operations will be limited to the hours of 8:00 am to 5:00 pm Monday through Friday; 8) All cultivation lighting will be contained within the mixed light structure; exterior lighting downward casting and fully-shielded; 9) Hazardous

materials will be stored in accordance with local, state and federal regulations; 10) All energy will be 100% renewably sourced; 11) No public access or retail sales are permitted.

LIST OF ATTACHMENTS

EXHIBIT A: Draft Conditions of Approval

EXHIBIT B: Graphics:

Figure 1. Site Plan Figure 2. Premise Map Figure 3. Vicinity Map Figure 4. Aerial Map

Figure 5. Cultivation Building Floor Plan Figure 6. General Plan Land Use Map

Figure 7. Zoning Map

EXHIBIT C: Public Comments:

Agencies

Public in Opposition
Public in Support

Early Comments (submitted in response to the 2017 early notification, not in

response to a formal public review period or County action)

Applicant's public outreach correspondence with neighbors and special interest groups

EXHIBIT D: Odor Sources

Lin et al. 2006.

United States Department of Agriculture, Natural Resources Conservation

Service (USDA NRCS). March 2007.

USDA NRCS. March 2014.

EXHIBIT E: Odor Control Plan EXHIBIT F: Draft Resolution

Separate Attachments for Commissioners: Mitigated Negative Declaration and larger sized maps

EXHIBIT A

REVISED Draft Conditions of Approval

DRAFT Cannabis Conditions of Approval – April 11, 2019

Date:April 11, 2019File No.:UPC17-0020Site Address:334 Purvine Road, PetalumaAPN:022-230-020

Applicant/Operator:Petaluma Hills Farm, LLC., Samuel MagruderApplicant Address:34 Page Street, San Francisco, CA 94102

Business Owner(s): Samuel Magruder, Managing Member

Gian-Paolo Veronese, Managing Member

Mike Harden, Managing Member

Landowner: Sonoma Hills Farm, LLC., Michael Harden, Managing Member

Landowner Address: 34 Page Street, San Francisco, CA 94102

Project Description: Request for a limited term use permit for a commercial cannabis operation, including 8,096 square feet of mixed light cultivation, 2,880 square feet of indoor cultivation, 28,560 square feet of outdoor cultivation, and 4,080 square feet of indoor propagation. On-site processing of site-grown cannabis will occur, consisting of trimming, drying, curing, weighing, and packaging. Indoor cultivation, indoor processing, and outdoor harvesting will occur 7 days per week, 24 hours per day, as needed. Outdoor cultivation activities (except for harvest) will occur 7 days per week but will be limited to daylight hours. Deliveries and shipping operations will be limited to the hours of 8:00 am to 5:00 pm Monday through Friday. The operation will have a maximum of 10 employees. The operation will not be open to the public.

Prior to commencing the use, evidence must be submitted to the file that all of the following conditions have been met.

FEES:

- 1. <u>Permit Processing and Development Fees.</u> This "At Cost" entitlement is not vested until all permit processing costs and development fees are paid in full. No grading or building permits shall be issued until all permit processing costs and development fees are paid in full.
- 2. <u>CEQA Filing Fee.</u> Within five working days after project approval, the applicant/operator shall pay a mandatory Notice of Determination filing fee of \$2,404.75 (or the latest fee in effect at the time of payment) for County Clerk processing. The fee will be charged against the project At-Cost deposit account and billed to the applicant, unless the applicant requests an alternate payment method, such as a check made out to the Sonoma County Clerk and submitted to Permit Sonoma in advance of the fee due date. NOTE: If the fee is not paid within five days after approval of the project, it will extend time frames for CEQA legal challenges.
- 3. <u>Workforce Housing.</u> Construction of new or expanded non-residential development shall be subject to Workforce Housing Requirements pursuant to 26-89-045 of the Sonoma County Code.





No grading or building permits shall be issued until Workforce Housing Requirements have been met. Internal tenant improvements are not subject to Workforce Housing Requirements.

- 4. Condition Compliance Fee. At the time of submitting a building permit application, the applicant/operator shall submit to Permit Sonoma an Approved Permit Condition Compliance Review fee deposit of \$2,675.00 (or other amount consistent with the adopted fee schedule in effect at the time). In addition, the applicant shall be responsible for payment of any additional compliance review fees that exceed the initial deposit (based upon hours of staff time worked) prior to final occupancy being granted.
- 5. Department of Agriculture Annual Site Monitoring Fee. Prior to building permit final or granting of occupancy for the use, the applicant/operator shall submit to Permit Sonoma a Department of Agriculture Annual Site Monitoring Fee of \$900.00 (or other amount consistent with the adopted fee schedule in effect at the time) to verify compliance with the ordinance. The applicant/operator shall be responsible for payment of additional annual site monitoring fees for each year over the effective term of the permit. The annual site monitoring fee shall be paid by January 31 of each year the permitted operation is active.
- 6. <u>Traffic Mitigation Fee.</u> Prior to building permit final or granting of occupancy for the use, the applicant/operator shall submit to Permit Sonoma a Traffic Mitigation Fee per Chapter 26, Article 98 of the Sonoma County Code. The fee is computed by multiplying project Average Daily Traffic (ADT) by the commercial fee in effect at the time of permit issuance. Evidence of payment shall be submitted to the Permit Sonoma Project Review Planner.

PLANNING:

Contact Permit Sonoma Planning at 707-565-8357

- 7. Type(s) and Limitations of Use:
 - a. This use permit allows for <u>cannabis cultivation</u>, including associated processing and packaging of cannabis grown on-site only.
 - b. This use permit does not allow public access to the cannabis operation.
 - c. This use permit does not allow any retail sales on-site or the delivery of cannabis to patients or the public.
 - d. If phased construction will occur rather than full buildout of permitted uses, a Phasing Plan shall be submitted for review and approval by Permit Sonoma staff within 90 days of Use Permit approval. At a minimum, the Phasing Plan shall include a floor plan and corresponding table disclosing the following for each room:
 - i. Room identifier/label.
 - ii. Square footage per room.
 - iii. Canopy area per room.
 - iv. Use (e.g., flower, vegetative propagation, processing, distribution).
 - v. Proposed phase and timeline for each phase





- e. The use shall be operated in accordance with the proposal statement, operational plans, and floor plan located in File No. UPC17-0020 as modified by these conditions.
- 8. **Propagation Area**. This use permit allows for 4,080 square feet of indoor propagation, 0.00 square feet of mixed light propagation, and 0.00 square feet of outdoor propagation, for a total cannabis propagation canopy area of 4,080 square feet. The operator shall not increase propagation area beyond 4,080 square feet at this location without prior approval from Permit Sonoma staff.
- 9. **Cultivation Area**. This use permit allows for 2,880 square feet of indoor cultivation, 8,096 square feet of mixed light cultivation, 28,560 square feet of outdoor cultivation, and 0.00 square feet of wholesale nursery cultivation, for a total cannabis cultivation canopy area of 39,536 square feet. The operator shall not increase cultivation area beyond 39,536 square feet at this location without prior approval from Permit Sonoma staff.
- 10. **Hours of Operation**. Indoor cultivation, indoor processing, and outdoor harvesting operations are allowed to occur 24 hours per day, 7 days a week. Outdoor cultivation activities (except for harvest) are allowed to occur 7 days per week but shall be limited to daylight hours. Deliveries and shipping operations shall be limited to the hours of 8:00 am to 5:00 pm Monday through Friday.
- 11. **Term of Permit**. This is a limited term permit and does not run with the land. No property interest, vested right, or entitlement to receive a future permit to operate a cannabis use shall ever ensure to the benefit of the permit holder as such permits are revocable and shall expire (Section 26-88-250 (e)). This permit for cannabis uses shall be issued to the operator for a period not to exceed five years from the date of issuance of the Use Permit Certificate and shall be subject to permit renewals. The Use Permit Certificate for UPC17-0020 shall expire five years after issuance, unless the applicant/operator applies for and is granted a permit renewal. The Operator must apply for permit renewal at least 90 days prior to expiration of the Use Permit Certificate to avoid interruption of service.

12. Operator(s) and Employees:

- a. The applicant/operator and all employees must be age 21 years or older. This use permit allows for a maximum of 10 employees.
- b. The applicant/operator shall be subject to background search and shall not be able to continue operations if there are any felony convictions, as specified in subdivision (c) of Section 667.5 of the Penal Code and subdivision (c) of Section 1192.7 of the Penal Code.
- c. An applicant/operator providing false or misleading information result in nullification or revocation of this issued use permit.
- 13. **Ownership changes.** Written notification shall be provided to Permit Sonoma prior to any of the following changes: 1) a new person meeting the definition of cannabis business owner of the permit holder, 2) change in business entity type of the permit holder, 3) change in legal business name of the permit holder, 4) a new person serving as operator of the permit holder, or 5) a new property owner. Supporting documentation shall be submitted to Permit Sonoma within 30 days of any of the aforementioned changes.





- 14. **Tracking.** The applicant/operator shall comply with any labeling, testing, and track and trace program established by the County and state agencies. The Operator must maintain records tracking all cannabis production and products and shall make all records related to commercial cannabis activity available to the County upon request.
- 15. **State Licensing.** The applicant/operator shall be required to obtain a state license and shall comply with any applicable state licensing requirements, such as operational standards and locational criteria.
- 16. Occupational Safety. The applicant/operator shall comply with all federal, state and local laws and regulations governing California Agricultural Employers, which may include but is not limited to: federal and state wage and hour laws, CAL/OSHA, OSHA and the California Agricultural Labor Relations Act.
- 17. **Security Plan.** The operation shall maintain all aspects of the approved site security plan (held confidentially at Permit Sonoma). This shall, at a minimum, include professionally monitored video surveillance, of which recordings will be kept for at least 30 days, perimeter fencing, controlled access gates, locking doors, lighting, and alarms. Weapons and firearms are prohibited. Cash shall be limited at the location to a minimum needed for the daily operations only and shall be placed in a secure location (e.g., locked drawer, safe, or similar storage cabinet with a locking mechanism).
 - A log of security incidents shall be kept and an annual report shall be submitted to Permit Sonoma annually by January 1 of each year the permit is active. The reporting shall be provided in a format agreed to by Permit Sonoma staff.
- 18. **Odor.** The applicant/operator shall install and maintain an odor control air filtration and ventilation system to control humidity and mold and to control off-site odor generated by the cannabis operation. This requirement shall apply to all permanent structures used in the operation, including mixed light greenhouses.
 - Daily inspections shall be performed by the on-site manager, and shall comply with the approved Odor Control Plan, as modified by these conditions. 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 (indoor cultivation/ greenhouse, and both processing buildings).

Daily inspections by the on-site manager shall also be conducted of the outdoor cultivation site (when in operation). Outdoor inspections shall be conducted when plant chemistry is most active (dusk or dawn; the actual inspection time shall be noted in the log), and shall note any damage to planted windbreaks that might reduce effectiveness.

A log of inspection results shall be kept and an annual report shall be submitted to Permit Sonoma annually by January 1 of each year the permit is active. Any odor complaints received shall also be documented, along with the complaint resolution and the timeframe required to address the odor issue, and shall also be included in the annual report. The reporting shall be provided in a format agreed to by Permit Sonoma staff.





- If verified odor complaints are received, Permit Sonoma staff may bring this matter back to the Board of Zoning Adjustments for review of additional measures to reduce odor generation, including use of engineered solutions, such as Vapor-Phase Systems (Fog Systems).
- 19. **Energy Use.** The applicant/operator shall submit and maintain documentation that the operation utilizes 100% renewable energy sources. Enrollment in the Sonoma Clean Power EverGreen program has been submitted and shall be maintained, unless another 100 percent renewable alternative is proposed. A request to modify energy provider must be submitted to Permit Sonoma and approved prior to making any change in energy service.
- 20. Maintenance of On-Site Agricultural Use. The applicant/operator shall maintain a primary agricultural use on the parcel. Currently, primary agricultural uses include a lease to graze cattle on 25 acres of the property and a lease to grow organic produce for restaurants on 1 acre of the property. Failure to maintain a primary agricultural use shall be considered a violation of this use permit, subject to revocation or modification.
- 21. **Signage.** The project approval does not include any signage. A separate administrative design review application will be required if any exterior signage is proposed.
- 22. **Taxes.** Cannabis uses shall be current on applicable Sonoma County Cannabis Business Taxes and any additional taxes enacted by the voters or this permit may be subject to revocation or non-renewal.
- 23. Water Efficient Landscaping. Landscaping plans must comply with the County Water Efficient Landscape Ordinance as required by the Water Efficient Landscape Regulations (Chapter 7D3 of the Sonoma County Building Code). Prior to Building Permit Issuance, a Landscape Plan shall be submitted for review and approval by Permit Sonoma. The approved Plan shall be implemented by the applicant/ operator prior to issuance of the Use Permit Certificate or operation of the use. Verification of implementation shall be required, either by photographic documentation or site inspection by the Project Planner, at the discretion of Permit Sonoma staff.
- 24. Water Conservation Plan. A Water Conservation Plan for the building shall be submitted for review and approval by Permit Sonoma. The Plan shall include all reasonably feasible measures to reduce water demand and enhance water resource recovery to the maximum extent feasible. Measures that must be evaluated include: installation of ultra-low-flow fixtures, best available conservation technologies for all water uses, rainwater and stormwater collection systems, and graywater reuse. The approved Water Conservation Plan shall be implemented by the applicant/operator and verified by staff prior to issuance of the Use Permit Certificate or operation of the use.
- 25. Greenhouse Gas Reduction Plan. A Greenhouse Gas Reduction Plan to reduce greenhouse gas emissions in the design, construction, and long-term operations of the project shall be submitted for review and approval by Permit Sonoma. The Greenhouse Gas Reduction Plan shall include all reasonably feasible measures to reduce greenhouse gas emissions to the maximum extent feasible. Measures that must be evaluated include but are not limited to: best available conservation technologies for all energy and water uses; installation of renewable energy facilities to meet demand on-site; provisions of electric vehicle charging stations; bicycle facilities including secure bike parking and lockers and showers for employees; employing best





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management practices for carbon sequestration, such as no till soils, reduced use of fertilizers, etc. The approved Greenhouse Gas Reduction Plan shall be implemented by the applicant/ operator and verified by staff prior to issuance of the Use Permit Certificate or operation of the use.

- 26. **Lighting.** All exterior lighting shall be fully shielded and downward casting and shall be located at the lowest possible point to the ground to prevent spill over onto other properties or the night sky. Outdoor security lighting shall have motion-sensors. Total illuminance beyond the property line created by simultaneous operation of all exterior lighting shall not exceed 1.0 lux.
- 27. **Design Review.** Prior to issuance of building permits, all new structures, lighting, fencing, landscaping, and signage shall require final design review (Permit Sonoma staff or Design Review Committee). All exterior finishes shall be of non-reflective materials and colors and shall be compatible with the surrounding area. Razor wire and similar fencing is not permitted. Prior to Verification of compliance with approved materials and colors, and implementation of landscaping shall be required prior to issuance of the Use Permit Certificate or operation of the use, either by photographic documentation or site inspection by the Project Planner, at the discretion of Permit Sonoma staff.
- 28. **Cultural Resource Protection.** The grading permit shall have the following notes printed on plan sheets prior to issuance:

"In the event that archaeological resources such as pottery, arrowheads, midden or culturally modified soil deposits are discovered at any time during grading, scraping or excavation within the property, all work shall be halted in the vicinity of the find and Permit Sonoma Project Review staff shall be notified and a qualified archaeologist shall be contacted immediately to make an evaluation of the find and report to Permit Sonoma. Permit Sonoma staff may consult with and/or notify the appropriate tribal representative from tribes known to have interests in the area. Artifacts associated with prehistoric sites include humanly modified stone, shell, bone or other cultural materials such as charcoal, ash and burned rock indicative of food procurement or processing activities. Prehistoric domestic resources include hearths, firepits, or house floor depressions whereas typical mortuary resources are represented by human skeletal remains. Historic artifacts potentially include all by-products of human land use greater than fifty (50) years of age including trash pits older than fifty (50) years of age. When contacted, a Permit Sonoma Project Review staff person and the archaeologist shall visit the site to determine the extent of the resources and to develop and coordinate proper protection/mitigation measures required for the discovery. Permit Sonoma may refer the mitigation/protection plan to designated tribal representatives for review and comment. No work shall commence until a protection/mitigation plan is reviewed and approved by Permit Sonoma. Mitigations may include avoidance, removal, preservation and/or recordation in accordance with California law. Archeological evaluation and mitigation shall be at the applicant's sole expense."

"If human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and PRMD staff, County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American, the Native American Heritage Commission must be contacted by the Coroner





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- so that a "Most Likely Descendant" can be designated and the appropriate provisions of the California Government Code and California Public Resources Code will be followed."
- 29. **Use Permit Certificate.** A Use Permit Certificate with these conditions, approved proposal statement, and approved floor plan shall be maintained on site and made available to county officials upon request.
- 30. **Conformance with Statutes.** This use shall be constructed, maintained, and operated in conformance with applicable county and state statutes, ordinances, rules, and regulations. A violation of any applicable statute, ordinance, rule, or regulation shall be considered a violation of this use permit, subject to revocation or modification.

BUILDING:

Contact Permit Sonoma Building Plan Check at 707-565-2095

- 31. The applicant/operator shall apply for and obtain building related permits from Permit Sonoma for new construction. The necessary applications appear to be, but may not be limited to accessibility report and building permit(s). Construction inspections shall occur and the building permit(s) finaled prior to occupancy of new or remodeled structure(s). A signed Declaration of Use that complies with the associated Use Permit application shall be submitted with the building permit application package.
- 32. Due to the scope of this commercial project, the California Business & Professions Code requires plans and calculations to be prepared by California licensed design professionals (architects, engineers). Cover sheet of plans shall identify the full scope of work, and shall include an architectural analysis of the proposed project including occupancies of all spaces, areas, area and height limitations, occupant load factors, occupant loads, exit system requirements, emergency egress, fire-rated construction details, fire separation requirements and fixture requirements. All buildings shall comply with prescriptive requirements of all applicable codes, including Energy and CALGreen.
- 33. In order to determine proper fire separations, the intended occupancies and uses of the facility, and spaces therein shall be clearly stated on the plans; similarly, the approved use and occupancy of the adjacent spaces in the building shall be shown. A detail of the wall assembly separating those spaces shall be shown on the plans. Plans shall include an analysis of proposed occupant load, area and height limitations, emergency egress and fire rated construction details.
- 34. Application materials shall be consistent with Permit Sonoma's Building/Grading Permit Application Submittal Checklist (Form # CSS-003).
- 35. All manufacturing uses shall be defined and scoped. All fertilizers, pesticides, corrosives, flammables, explosives and/or toxic materials that may be stored or used at the facility shall be defined, scoped and quantified. A control area analysis shall be provided for any of the above materials exceeding code-prescribed thresholds.
- 36. Mechanical, electrical and plumbing plans shall be fully detailed. Plumbing system materials used to convey concentrated byproducts of water reuse process equipment shall be identified and detailed from point of inlet to point of discharge. Path of reclaimed condensate systems and associated storage and conveyance equipment shall be identified and detailed.





- 37. The applicant/operator shall comply with California Building Code section 11B-202.3, which requires that alterations to existing elements or spaces to comply with the accessibility requirements of CBC 11B Division 2. All buildings, structures, sidewalks, curbs, and related facilities, intended for use by the public or employees, shall be accessible to and usable by persons with disabilities. Accessible parking shall be provided for both assigned and unassigned and/or visitor spaces per CBC requirements. Plans shall include details of the path of travel from accessible parking to the area of alteration. All facilities serving the area of alteration shall be made accessible. Prior to initiation of the approved use, the project shall comply with the accessibility requirements set forth in the most recent CBC as determined by the Permit Sonoma Building Division. Such accessibility requirements shall apply to all new construction and remodeling and, where required by the CBC, to retrofitting of the existing structure. For this purpose, a change of use or occupancy classification is considered to be an alteration.
- 38. All permanently installed equipment shall be identified in the appropriate section of the mechanical/electrical/plumbing sheets. Product information shall be included to verify installation and use of equipment is consistent with manufacturer's listing and/or recommendations.
- 39. Prior to any site review or field inspections, any materials or systems that could present a danger to inspectors shall be isolated and secured. All field inspection staff shall be accompanied by personnel familiar with systems and construction capable of describing and controlling equipment.
- 40. Any structures to be constructed as part of use permit conditions, such as security or sound walls, shall require separate building applications and permits.
- 41. Per CBC Ch. 10, any racking systems proposed shall be limited in size to allow continuous unobstructed egress from all portions of the room of facility and shall also comply with Chapter 15 of the ASCE 7-10 design standard, specifically Section 15.5.3 for anchorage of racks to meet seismic requirements.

Natural Resources Geologist:

Contact Permit Sonoma Natural Resources at 707-565-1352

PRIOR TO BUILDING PERMIT AND VESTING THE USE PERMIT:

42. Prior to the issuance of any building permit, an Easement is required to be recorded for this project to provide Sonoma County personnel access to any on-site water well serving this project and any required monitoring well to collect water meter readings and groundwater level measurements. Access shall be granted Monday through Friday from 8:00 a.m. to 5:00 p.m. All Easement language is subject to review and approval by PERMIT SONOMA Project Review staff and County Counsel prior to recordation.

PRIOR TO OCCUPANCY:

43. Water well(s) used for cultivation shall be equipped with a meter and sounding tube or other water level sounding device and marked with a measuring reference point.

OPERATIONAL REQUIREMENTS:

44. Water meters shall be calibrated and copies of receipts and correction factors shall be





submitted to Permit Sonoma staff at least once every five years. Static water level and total quantity of water pumped shall be recorded quarterly and reported annually. Static water level is the depth from ground level to the well water level when the pump is not operating after being turned off. Static water shall be measured by turning the pump off at the end of the working day and recording the water level at the beginning of the following day before turning the pump back on. Groundwater monitoring reports shall be submitted annually to the County by January 31 of each year. The annual report shall show the location of the well(s) with the groundwater level measuring device and the location of the water meter(s), and shall include a cumulative hydrograph of static water levels and total quarterly quantities of water pumped from well(s) used in the operation.

- 45. The location of the wells, and groundwater elevations and quantities of groundwater extracted for this use shall be monitored quarterly and reported to Permit Sonoma in January of the following year pursuant to Section WR-2d of the Sonoma County General Plan and County policies. Annual monitoring fees shall be paid at the rate specified in the County Fee Ordinance. If the County determines that groundwater levels are declining in the basin, then the applicant shall submit and implement a Water Conservation Plan, subject to review and approval by Permit Sonoma.
- 46. Prior to building permit final or granting of occupancy or initiation of the use, the County shall verify that the well monitoring equipment has been installed and that the access easement has been recorded. Water meters shall be calibrated and copies of receipts and correction factors shall be submitted to Permit Sonoma staff at least once every five years. In the event that project groundwater use exceeds 2.08 acre-feet per year from the project well, Permit Sonoma staff may bring this matter back to the Board of Zoning Adjustments for review of additional measures to reduce water use. In the event that groundwater use exceeds 2.08 acre-feet per year by more than 10 percent, Permit Sonoma staff shall bring this matter back to the Board of Zoning Adjustments to consider whether additional measures to reduce water use are appropriate.

Grading and Storm Water:

Contact Permit Sonoma Grading and Storm Water at 707-565-1352

- 47. Grading and/or building permits require review and approval by the Grading & Storm Water Section of the Permit and Resource Management Department (PRMD) prior to issuance. Grading permit applications shall abide by all applicable standards and provisions of the Sonoma County Code and all other relevant laws and regulations.
- 48. A soils engineering report, prepared by a soils engineer, and engineering geology report, prepared by an engineering geologist, shall to be submitted with the grading permit application(s) for the proposed project. The soils engineer and the engineering geologist must be currently registered in the State of California.
- 49. A drainage report for the proposed project shall be prepared by a civil engineer, currently registered in the State of California, be submitted with the grading and/or building permit application, and be subject to review and approval by the Grading & Storm Water Section of the Permit and Resource Management Department (PRMD). The drainage report shall include, at a minimum, a project narrative, on- and off-site hydrology maps, hydrologic calculations,





- hydraulic calculations, pre- and post-development analysis for all relevant existing and proposed drainage facilities. The drainage report shall abide by and contain all applicable items in the Drainage Report Required Contents (DRN-006) handout.
- 50. Drainage improvements shall be designed by a civil engineer, currently registered in the State of California, and in accordance with the Sonoma County Water Agency Flood Control Design Criteria. Drainage improvements shall be shown on the grading/site plans and be submitted to the Grading &Storm Water Section of the Permit and Resource Management Department (PRMD) for review and approval. Drainage improvements shall maintain off-site natural drainage patterns, limit post-development storm water quantities and pollutant discharges in compliance with PRMD's best management practices guide, and shall abide by all applicable standards and provisions of the Sonoma County Code and all other relevant laws and regulations. Existing drainage patterns shall be maintained, to the maximum extent practicable, to not adversely impact adjacent properties or drainage systems. Proposed drainage improvements shall not adversely impact adjacent properties or drainage systems.
- 51. The applicant shall provide grading plans, prepared by a civil engineer currently registered in the State of California, which clearly indicate the nature and extent of the work proposed and include all existing and proposed land features, elevations, roads, driveways, buildings, limits of grading, limits of disturbed area/total work, adequate grading cross sections and drainage facilities such as swales, channels, closed conduits, or drainage structures. The grading plans shall abide by and contain all applicable items from the Grading Permit Required Application Contents (GRD-004) handout.
- 52. As part of the grading plans, the applicant shall include an erosion prevention/sediment control plan which clearly shows best management practices to be implemented, limits of disturbed areas/total work, vegetated areas to be preserved, pertinent details, notes, and specifications to prevent damages or minimize adverse impacts to the surrounding properties and the environment. Tracking of soil or construction debris into the public right-of-way shall be prohibited. Runoff containing concrete waste or by-products shall not be allowed to drain to the storm drain system, waterway(s), or adjacent lands. The erosion prevention/sediment control plan shall abide by and contain all applicable items in the Grading Permit Required Application Contents (GRD-004) handout. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves. Monofilament netting, including photo- or biodegradable plastic netting shall not be used.
- 53. Residue or polluted runoff from the outdoor cultivation areas shall not be allowed to drain directly to the storm drain system, waterway(s) or adjacent lands.
- 54. Runoff from waste receptacles or outside washing areas shall not be allowed to drain directly to the storm drain system, waterway(s) or adjacent lands. Areas used for waste receptacles and outside washing areas shall be covered or separated from the rest of the project site by grade breaks that prevent storm water run-on. Any surface water flow from a waste receptacle or outside washing area shall not be permitted to enter the storm drain system without receiving appropriate treatment.





- 55. If the cumulative land disturbance of the project is equal to or greater than one (1) acre, then the project is subject to National Pollutant Discharge Elimination System (NPDES) requirements and must obtain coverage under the State Water Resource Control Board's General Construction Permit (General Permit). Documentation of coverage under the General Permit must be submitted to the Grading &Storm Water Section of the Permit and Resource Management Department prior to issuance of any grading permit for the proposed project.
- 56. If the cumulative land disturbance of the project is equal to or greater than one (1) acre, then the project is subject to National Pollutant Discharge Elimination System (NPDES) requirements and must obtain coverage under the State Water Resource Control Board's General Construction Permit (General Permit). Documentation of coverage under the General Permit must be submitted to the Grading & Storm Water Section of the Permit and Resource Management Department prior to issuance of any grading permit for the proposed project.

FIRE:

Contact Fire and Emergency Services at 707-565-2191

Permitting or development approval is subject to the Sonoma County Fire Safety Ordinance (Sonoma County Code). All applications for development approvals must be approved by the Sonoma County Fire Marshal, and shall be accompanied by: plans, engineering calculations, and other data necessary to determine compliance with the provisions of the codes, and shall be in compliance with the following conditions:

(Ref. California Code of Regulations Title-14, Division 1.5, Chapter 7, Subchapter 2, Articles 1 – 5, & Sonoma County Code Chapter 13, Article IV, Section 13-17 & Sonoma County Code Chapter 13, Article V, Division A, Section 13-24)

- 57. Due to the scope of this project a Fire Services Pre-Construction meeting is required.
- 58. Prior to initiation of the use, the project shall submit a Fire Prevention Plan demonstrating compliance with the Sonoma County Fire Safety Ordinance (Sonoma County Code), subject to review and approval by the Sonoma County Fire Marshal. The Plan be accompanied by: plans, engineering calculations, and other data necessary to determine compliance with the provisions of the codes, and shall be in compliance with the following conditions:(Ref. California Code of Regulations Title-14, Division 1.5,Chapter 7, Subchapter 2, Articles 1 5, & Sonoma County Code Chapter 13, Article IV, Section 13-17 & Sonoma County Code Chapter 13, Article V, Division A, Section 13-24)
- 59. The subject property (or properties) must be in full compliance with Building Code regulations, Fire Code Regulations and Hazardous Materials regulations prior to occupancy of the building and use of the property.
 - a. A fire inspection shall be conducted by the Sonoma County Fire and Emergency Services
 Department to determine if the subject property (or properties) is currently in full
 compliance with applicable Building Code regulations, Fire Code Regulations and
 Hazardous Materials regulations.





- b. The Sonoma County Fire and Emergency Services Department may charge and collect a fee for the inspection in an amount, as determined by the county, sufficient to pay its costs of that inspection.
- c. The building (s) shall be fire sprinklered and contain a fire alarm system consistent with the occupancy type. Existing sprinklered or non-sprinklered buildings shall be verified based on design to be in compliance with specific occupancy type.
- 60. To determine the acceptability of technologies, processes, products, facilities, materials and uses attending the design, operation or use of a building or premises the applicant shall provide a technical opinion and report prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The report and opinion shall analyze the fire safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon. CFC Sec. 104.7.2, CBC Sec. 414.1.3.
- 61. Where no applicable standards or requirements are set forth within the California Fire Code, the Sonoma County Code, or other laws, codes, regulations, and ordinances adopted by the jurisdiction; compliance with applicable standards of the National Fire Protection Association shall be used in addition to the codes, regulations and ordinances adopted by the jurisdiction to meet the intent of the codes.
- 62. Site Plan shall indicate any proposed exterior security fencing, personnel gates or vehicular gates. Note exit discharge shall be direct and unobstructed to the public way.

Fire - Operational Permits

- 63. Applicable Fire Code operational permits shall be obtained prior to the initiation of any activity where an operational permit is required by the California Fire Code as adopted and amended by Sonoma County Code for Cannabis type operations (CFC Sec. 105.6.50(11)).
 - a. Hazardous material: storing, transporting on site, dispensing, using or handling hazardous materials
 - b. Cannabis type operations
- 64. An annual fire safety inspection maybe required by the fire code official for any facility requiring a Fire Code Operational Permit. The county or fire district which inspects the facility may charge and collect a fee for the inspection from the owner of the facility in an amount, as determined by the county or fire district, sufficient to pay its costs of that inspection.

Construction Permits

- 65. Applicable Fire Code construction permits shall be obtained prior to any construction that would require such permit required by California Fire Code as adopted and amended by Sonoma County Code.
- 66. The facility operator shall develop an emergency response plan consistent with Chapter 4 of the 2013 California Fire Code as adopted and amended by Sonoma County Code. Fire safety plans, emergency procedures, and employee training programs shall be approved by the fire code official.





Fire - Emergency Planning and Response

- 67. A Fire Protection plan shall be provided prior to operation and shall provide information about the property including but not limited to the following. See Chapter 4 of the California Fire Code and http://sonomacounty.ca.gov/FES/Fire-Prevention/Cannabis/
 - a. Emergency Contacts
 - b. Address
 - c. Property owner
 - d. Fire access roads including gates
 - e. Water supplies and hydrants
 - f. Location of hazardous materials
 - g. Utilities
 - h. Floor plans showing intended use of each room/area
 - i. Employee training for use of regulated materials in the fire code
 - i. When required by the local fire jurisdiction special processing of cannabis may require the facility to have identified trained staff including a main point of contact to oversee and train employees in the special process.
 - ii. This process shall have onsite training records for review and a manual in address emergencies associated with the special process. (Example is extraction equipment)

Fire - Access

- 68. Prior to operation, the applicant/operator shall at a minimum facilitate locating an emergency, avoid delays in response and provide for safe access for emergency fire apparatus and civilian evacuation concurrently, and shall provide and unobstructed traffic circulation during an emergency, and shall be constructed and maintained as required by Sonoma County Fire Safe Standards and the California Fire Code. The following shall be approved by the fire code official prior to operation.
 - a. All existing roads providing access to new commercial cannabis operations with structures shall be provided with an access road not less than 20 feet in width. Access roads may be allowed to be reduced to 12 feet in width with turnouts as approved by the fire code official.
 - i. This requirement shall apply from the property line of the application to the public right-of-way.
 - ii. This requirement may be waved with written approval by Sonoma County Fire or the Fire Code Official.
 - b. All roadways and building shall be identified by approved road signs clearly visible and legible from the roadway and at interchanges, as required by the California Fire Code as adopted and amended by Sonoma County Code, and as required by Sonoma County Fire Safe Standards.





Fire - Water Supply

- 69. Emergency water supply for fire protection shall be available and accessible in locations, quantities and delivery rates as specified in the California Fire Code as adopted and amended by Sonoma County Code.
 - a. Fire hydrants shall be installed as required by the California Fire Code as adopted and amended by Sonoma County Code.
 - Emergency water supply for fire suppression may be provided in a naturally occurring or manmade containment structure for projects not served by a municipal water system, as long as the specified quantity and delivery rate is immediately provided.

Vegetation Management

70. On each parcel, building setbacks shall be in compliance with the California Fire Code and California Building Code as adopted and amended by Sonoma County Code, and Sonoma County Fire Safe Standards Section 13-55.

Fire - Occupancy

71. Prior to occupancy, written approval that the required improvements and comments have been addressed and/or corrected shall be provided to Permit Sonoma from the County Fire Marshal/Local Fire Protection District.

ENVIRONMENTAL HEALTH (Permit Sonoma): Contact Permit Sonoma Health at (707) 565-1924

PRIOR TO BUILDING PERMIT AND VESTING THE USE PERMIT:

Water

- 72. Prior to building permit issuance and project operation, provide the Project Review Health Specialist with the bacteriological (E. Coli and total coliform) arsenic and nitrate analysis results of a sample of your water tested by a State-certified lab. If the analysis shows contamination, the applicant will be required to treat the well per County requirements and re-test the well. If the contamination cannot be cleared from the well, destruction under permit of this Department may be required. As an alternative to the well destruction, the applicant may initiate a permanent water treatment program subject to the following requirements prior to issuance of a building permit and/or commencement of project operation: a. A deed restriction running with the land and acceptable to PRMD and County Counsel notifying subsequent property owners that treatment of the water supply is required as a condition of this Use Permit in order to meet State and Federal MCL's and provide potable water to all plumbing fixtures. b. Proof of a contract with a qualified service provider shall be submitted for routine/diagnostic water testing, monitoring, maintenance, and record keeping of the water supply system. Initial water test results before and after the water treatment device shall be submitted to PRMD Project Review Health Specialist.
- 73. The project is located within the Petaluma Nitrate Study Area and consequently the water supply well is required to have a 100-foot annular seal, or water intended for human or animal consumption must be treated in compliance with the Sonoma County Well Ordinance (Sec. 25B-





- 8(b)). Prior to issuance of building permits, a treatment plan shall be submitted to the Project Review Health Specialist for review and approval. The Plan shall comply with all requirements of the well ordinance and shall provide a site plan identifying where treatment equipment and treated and non-treated water lines will be located.
- Prior to issuance of a Use Permit Certificate or final occupancy, water treatment equipment shall be installed and verified by Permit Sonoma staff.
- 74. Prior to issuance of a Use Permit Certificate or final occupancy, the applicant shall install appropriate warning signage at all non-potable water access points. Signage shall be dual language or shall include "Do Not Drink the Water" pictographs. Verification of sign installation shall be required, either by photographic documentation or site inspection by the Project Planner, at the discretion of Permit Sonoma staff.
- 75. Prior to issuance of a building permit, the components of the indoor irrigation system shall be proven to be appropriately specific for the intended use and shall comply with the equipment manufacturer's instructions, cautions, and warnings. For the health and safety of employees working in an enclosed greenhouse environment containing high moisture with aerosolized chemicals and microbes, installation and use of the irrigation equipment/components shall adhere to the manufacturer's installation, use, and maintenance instructions. Proof of appropriately specific irrigation system equipment and components shall be submitted to the Project Review Health Specialist.

Septic

- 76. Prior to building permit issuance and vesting the Use Permit, the applicant shall have a capacity/wastewater flow analysis and proper functioning of the wastewater system inspection completed by a Registered Civil Engineer or Registered Environmental Health Specialist regarding the existing septic system's ability to accommodate the peak flows from all sources granted in the Revised Use Permit. Any necessary system expansion or modifications, and demonstration of reserve areas, shall be done under permit and the current standards from the PRMD Well and Septic Section and may require both soils analysis, groundwater and percolation testing. If a permit for a standard, innovative or experimental sewage disposal system sized to meet all peak flows cannot be issued, then the applicant shall revise the project (fees apply and a hearing may be required) to amend the Use Permit to a reduced size, not to exceed the on-site disposal capabilities of the project site and attendant easements.
- 77. Prior to demolition permit issuance the applicant shall abandon existing septic tank(s) under permit and inspection from the PRMD Well and Septic Section. The Project Review Health Specialist shall receive a copy of the "finaled" Abandonment Permit.
- 78. Toilet facilities shall be provided for employees prior to vesting the Use Permit. A copy of the Floor Plan showing the location of the restrooms shall be submitted to the Project Review Health Specialist prior to issuance of building permits.

Solid Waste

79. Prior to building permit issuance, the applicant/operator shall submit a design for trash enclosures and recycling areas for review and approval by the Permit Sonoma Building Plan Check Section. (Fees may apply.) Note that trash trucks must have at least a 34-foot turning





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radius at the trash enclosure and the dumpster must have 14 feet of overhead clearance with an additional 5 feet of clearance (total of 19 feet high) at the location where the bins are tipped.

PRIOR TO OCCUPANCY:

Water

- 80. Prior to Occupancy the applicant/operator shall have the water supply system evaluated for potential contamination or pollution via backflow by an American Water Works Association certified Cross Connection Control Specialist. The recommendations for cross connection control shall, at a minimum, meet the requirements of the 2016 California Plumbing Code and subsequent editions adopted by Sonoma County. A copy of the report must be submitted to the Project Review Health Specialist for review. If the applicant has been required to do a cross-connection control survey by the California State Water Resources Control Board, Division of Drinking Water, then a copy of that survey may be submitted to meet this condition within 120 days after occupancy.
- 81. Prior to occupancy, backflow prevention devices shall be installed on the water supply system as recommended, after concurrence with the hazard evaluation and recommendations for cross connection control report by PRMD. The Project Review Health Specialist shall receive a letter from the Cross Connection Control Specialist stating that backflow prevention has been installed as recommended.

Solid Waste

82. Prior to building occupancy, the applicant shall submit a cannabis solid waste management plan with the compost and trash enclosure design to Sonoma County Environmental Health, Solid Waste/Cannabis programs for review and approval. The Project Review Health Specialist shall receive a clearance letter or e-mail from Sonoma County Environmental Health regarding the project solid waste management plan and compost/trash enclosure design.

OPERATIONAL REQUIREMENTS:

Water

- 83. The property owner or lease holder shall have the backflow prevention assembly tested by an American Water Works Association certified Backflow Prevention Assembly Tester at the time of installation, repair, or relocation and at least on an annual schedule thereafter.
- 84. A safe, potable water supply shall be provided and maintained.

Septic

- 85. Use of the on-site wastewater disposal system shall be in accordance with the design and approval of the system.
- 86. All future sewage disposal system repairs shall be completed in the Designated Reserve areas and shall meet Class I Standards. Alternate reserve areas may be designated if soil evaluation and testing demonstrate that the alternative reserve area meets or exceeds all of the requirements that would have been met by the original reserve area. If wastewater ponds or a





package treatment plant are needed, then a modification of the Use Permit may be required, as determined by PRMD.

Noise

87. Noise shall be controlled in accordance with Table NE-2 (or an adjusted Table NE-2 with respect to ambient noise as described in General Plan 2020, Policy NE-1c,) as measured at the exterior property line of any affected residential or sensitive land use:

TABLE NE-2: Maximum Allowable Exterior Noise Exposures

Hourly Noise Metric ¹ , 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 (4 minutes 48 seconds in any	60	55
hour)		
L02 (72 seconds in any hour)	65	60

¹ The sound level exceeded 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.

- 88. <u>Mitigation Measure NOISE-1 HVAC Unit Sound Wall:</u> A wall for sound attenuation shall be constructed on three sides of the cultivation HVAC unit. The wall shall be constructed of ½ inch thick (at a minimum) plywood and studs; the top of the wall shall extend to a minimum of two feet above the top of the HVAC unit. Solid walls of brick, masonry, or other robust materials are also allowable instead of lumber as long as they attenuate sound to an equal or greater degree.
- 89. <u>Mitigation Measure NOISE-2 Construction Operation:</u> All plans and specifications or construction plans shall include the following notes:
 - 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





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- 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.
- 90. If noise complaints are received from nearby residents, and they appear to be valid complaints, then the applicant/operator shall conduct a Noise Study to determine if the current operations meet noise standards and identify any additional noise Mitigation Measures if necessary. A copy of the Noise Study shall be submitted to the Project Review Health Specialist within sixty days of notification from Permit Sonoma that a noise complaint has been received. The applicant/operator shall implement any additional Mitigation Measures needed to meet noise standards.
- 91. Tastings, promotional activities, and events are prohibited by Sonoma County Code Section 26-88-250(c) and therefore are also prohibited by this Cannabis Use Permit.

Solid Waste

92. All garbage and refuse on this site shall be 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. Garbage and refuse on this site shall not be accumulated or stored from more than seven calendar days, and shall be properly disposed of at a County transfer Station or County Landfill before the end of the seventh day.

Smoking

- 93. Smoking is prohibited in any public area, in any dining area, service area (including entry lines or ticket purchase lines) and in any enclosed area that is a place of employment (Sonoma County Code 32-6). "No Smoking" signs shall be conspicuously posted at the point of entry into every building where smoking is prohibited by Chapter 32 of the Sonoma County Code. The California Health and Safety Code (section 113978) also requires the posting of "No Smoking" signs in all food preparation areas, all retail food storage areas, and all food utensil washing areas. Note that Health and Safety Code section 113781 definition of food includes any beverage intended for human consumption.
- 94. A "Designated Smoking Area" may be established in unenclosed areas consistent with Sonoma County Code section 32-3. Designated Smoking Areas must be at least 25 feet away from any building or area where smoking is prohibited, must be conspicuously identified by signs as a smoking area, and shall be equipped with ash trays or ash can.
- 95. Smoking or consumption of Cannabis or materials containing Cannabis is prohibited in any work area

SONOMA COUNTY TRANSPORTATION AND PUBLIC WORKS: Contact Transportation & Public Works at 707-565-2231





Right of Way Requirements

- 96. The Applicant/Operator shall offer right-of-way to the County of Sonoma, free of encumbrances, and of sufficient width:
 - a. As necessary to create public right-of-way a total of 25 feet wide on the Applicant's side of the road, as measured from the existing pavement centerline, for the full length of the property's frontage on Purvine Road. This condition shall be void if the existing right-of-way meets or exceeds the minimum requirement(s) described above.
 - b. To contain all Public drainage facilities.

Intersections of Roads and Driveways

- 97. The Applicant/Operator shall construct a driveway entrance that conforms to AASHTO standards and meets the following criteria to allow for the smooth and safe movement of passenger vehicles entering and exiting the public road (Purvine Road) that provides access to the property. This condition shall be void if the existing entrance meets these requirements. A signed and stamped statement from a Registered Civil Engineer, licensed in the State of California, will be required to prove the driveway (project's entry to Purvine Road) meets these requirements.
 - a. A minimum throat width of 24 feet (measured 30 feet from the edge of pavement).
 - b. Entrance curves having a minimum pavement radius of 25 feet; the entrance curves shall begin on a line that is 12 feet distant from, and parallel with, the physical centerline of Petaluma Hill Road. A 1:10 pavement taper shall be constructed on both sides of the entrance. Entrance curve radii may be reduced with the approval of the Fire Services Division of the Sonoma County Department of Emergency Services.
 - c. The minimum sight distance for vehicles entering and exiting the driveway shall be in accordance with current AASHTO requirements for the speed traveled on Purvine Road. Any monuments and/or signs that result from this proposal shall be located outside of the necessary sight distance triangles to achieve the minimum AASHTO required sight distance at each driveway.
 - d. The entry shall be surfaced with asphalt concrete a minimum distance of 25 feet from the existing edge of pavement.
 - e. Refer to County of Sonoma Department of Transportation and Public Works Construction Standard Drawing 814, latest revision, for private road and driveway intersection details.
 - f. Improvements shall be constructed prior to use of the property for the proposed land entitlement.
- 98. The Applicant shall construct a stabilized entrance for on-site construction activity to meet the following criteria prior to issuance of building permits:
 - a. The entrance shall be of sufficient width to accommodate two-way traffic.





- b. The entrance surface shall be stabilized to prevent tracking of gravel and mud onto the public road.
- c. The minimum sight distance for vehicles entering and exiting the construction entrance shall be in accordance with current AASHTO requirements for the speed traveled on the public road(s) providing construction access. Any monuments and/or signs that result from this proposal shall be located outside of the necessary sight distance triangles to achieve the minimum AASHTO required sight distance at each driveway.
- 99. The applicant/operator shall not construct, install, or place any monuments and/or signs within the necessary sight distance triangles required to achieve the minimum AASHTO required sight distance at any project entry where it intersects a public roadway.

Emergency Vehicle Access

100. The Applicant shall locate driveway gates a minimum distance of 30 feet from the edge of the public road traveled way, in accordance with Sonoma County Mandatory Fire Safe Standards, Section 13-38.

Processing

101. The Applicant shall obtain an Encroachment Permit issued by Permit Sonoma (PRMD) prior to constructing any improvements within County road right-of-way.

MITIGATION MEASURES FROM MND, DATED 3/11/2019, AS AMENDED 4/11/2019:

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

The following dust and air quality control measures shall be included in the project:

- 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 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.
- 103. Mitigation Measure AIR-2 Operational Odor Control for Structures: The cannabis cultivation building shall install and maintain an odor control air filtration and ventilation system that controls humidity and mold and ensures there will be no off-site odor from structures. Daily inspections shall be performed by the on-site manager. 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 (indoor cultivation/ greenhouse, and both processing buildings).
- 104. <u>Mitigation Measure AIR-3 Operational Odor Control for Outdoor Cultivation</u>: In the event that multiple verified odor complaints are received, Permit Sonoma staff may bring this matter back to the Board of Zoning Adjustments for review of additional measures to reduce outdoor odor generation, including use of engineered solutions such as Vapor-Phase Systems (Fog Systems).
- 105. Mitigation Measure BIO-1 Amphibian Pre-Construction Survey(s): Pre-construction surveys shall be performed within 24 hours of initiation of project activities (including initial ground disturbing activities). Any small mammal burrows found shall be protected with a 30-foot buffer and exclusion fencing placed around the construction site. Any small mammal burrows found shall be protected with a 30-foot buffer and exclusion fencing placed around the construction site. No construction activities shall occur during rain events, defined as ¼ inches of rain falling within a 24-hour period; however, construction activities may resume 24 hours after the end of the rain event. Prior to construction, all workers on the crew shall be trained by a qualified biologist as to the sensitivity of special-status species potentially occurring in the project area. If any special status amphibians are encountered during the surveys, all work in the area shall be





- placed on hold while findings are reported to state and federal regulatory agencies, and it is determined what, if any, further actions must be followed to prevent possible take of the species.
- 106. Mitigation Measure BIO-2 Roosting Bat Pre-Construction Survey(s): If initial ground disturbance or building demolition occurs during the bat maternity roosting season (May 1 through August 31), a qualified biologist shall conduct a bat roost assessment of trees and structures within 100 feet of the construction site. Surveys shall be conducted immediately prior to construction (within 1 to 2 days). Surveys shall be conducted immediately prior to construction (within 1 to 2 days). If the biologist determines there is potential for maternity roosting bats to be present within 100 feet of the project site, nighttime emergence surveys shall be performed to determine if maternity roosting bats are present. If bat maternity roosts are present, the biologist shall establish an appropriate exclusion zone around the maternity roost. Once all young have become independent of the roost, construction may take place in the former exclusion zone.
- 107. Mitigation Measure BIO-3 Nesting Bird Pre-Construction Survey(s): If initial ground disturbance or vegetation removal occurs during the breeding season (February 1 through August 31), a qualified biologist shall conduct a breeding bird survey no more than 14 days prior to ground disturbance to determine if any birds are nesting in underground burrows or dens, or in trees on or adjacent to the project site. If active nests are found close enough to the project site to affect breeding success, the biologist shall establish an appropriate exclusion zone around the nest. This exclusion zone 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. Once all young have become independent of the nest, vegetation removal and grading may take place in the former exclusion zone. 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. If a burrowing owl or occupied burrow is found, CDFW will be contacted to determine the appropriate mitigation measure to avoid impacts on the species, which may include relocating the owl or burrow to a safe location.
- 108. Mitigation Measure BIO-4 American Badger Pre-Construction Survey: If initial ground disturbance or vegetation removal occurs during the badger breeding season (February through May), a qualified biologist shall conduct a badger survey prior to construction activities. This survey could be conducted concurrently with preconstruction nesting bird surveys conducted within the same time period. If a badger or its den is found, CDFW will be contacted to determine the appropriate mitigation measure to avoid impacts on the species, which may include relocating the badger or den to a safe location.
- 109. Mitigation Measure BIO-5 Pre-Construction Rare Plant Survey: If initial ground disturbance occurs during the blooming period of congested-headed hayfield tarplant (May-November), a qualified biologist shall conduct a pre-construction survey of the disturbance area prior to construction activities. If the plant is found, CDFW will be contacted to determine the appropriate mitigation measure to avoid impacts on the species, which may include collection and redistribution of the seedbank.





- 110. Mitigation Measure CUL-1 Archive or Salvage Building Materials: Prior to demolition of any structures, the applicant shall inventory the architectural elements to re-use on site or donate to the Sonoma County Historical Society or other appropriate archival facility. Any associated artifacts or other architectural elements that are feasible to archive or store shall be salvaged. The associated artifact or architectural element shall be carefully removed and properly stored for reuse or delivered to the archive facility in good condition to be used in future conservation work.
- 111. Mitigation Measure CUL-2 Interpretive Display: The applicant shall work with the Sonoma County Historical Society or the Petaluma Historical Library and Museum in developing an interpretive display about the Collings family history and chicken farming on the property that can be displayed on site. This could include a film documentation, historical photographs, and/or an oral history with interviews conducted by a professional oral historian with Walter Collings.
- 112. <u>Mitigation Measure CUL-3 Archaeological Monitoring:</u> A qualified Archaeological Monitor shall be present onsite during all initial grading and ground disturbance activities, including any vegetation removal or grubbing. Monitoring shall continue until, in the Archaeological Monitor's judgment, cultural resources are not likely to be encountered.
 - If archaeological materials are encountered during ground-disturbing activities, all work within 25 feet of the discovery shall be halted until the archaeologist assesses the finds, consults with the appropriate individuals and agencies, and makes recommendations for the treatment of the discovery. 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.

GENERAL:

- 113. Any proposed modification, alteration, and/or expansion of the use authorized by this use permit shall require the prior review and approval of Permit Sonoma or the Board of Zoning Adjustments, as appropriate. Such changes may require a new or modified use permit and additional environmental review, if warranted.
- 114. The Director of Permit Sonoma is hereby authorized to modify these conditions for minor adjustments to respond to unforeseen field constraints provided that the goals of these conditions can be safely achieved in some other manner. The applicant must submit a written request to Permit Sonoma demonstrating that the condition(s) is infeasible due to specific constraints (e.g. lack of property rights) and shall include a proposed alternative measure or option to meet the goal or purpose of the condition. Permit Sonoma shall consult with affected departments and agencies and may require an application for modification of the approved permit. Changes to conditions that may be authorized by Permit Sonoma are limited to those items that are not adopted standards or were not adopted as mitigation measures or that were not at issue during the public hearing process. Any modification of the permit conditions shall be documented with an approval letter from Permit Sonoma, and shall not affect the original permit approval date or the term for expiration of the permit.





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- 115. This permit may be subject to revocation or modification by the Board of Zoning Adjustments if: (a) the Board finds that there has been noncompliance with any of the conditions or (b) the Board finds that the use for which this permit is hereby granted constitutes a nuisance. Any such revocation shall be preceded by a public hearing noticed and heard pursuant to Section 26-92-120 and 26-92-140 of the Sonoma County Code.
- 116. In any case where a use permit has not been used (as evidenced by issuance of a Use Permit Certificate to operate) within two (2) years after the date of the granting thereof, or for such additional period as may be specified in the permit, such permit shall become automatically void and of no further effect, provided however, that upon written request by the applicant prior to the expiration of the two year period the permit approval may be extended for not more than one (1) year by the authority which granted the original permit pursuant to Section 26-92-130 of the Sonoma County Code.





EXHIBIT B

Graphics

Figure 1. Site Plan

Figure 2. Premise Map

Figure 3. Vicinity Map

Figure 4. Aerial Map

Figure 5. Cultivation Building Floor Plan

Figure 6. General Plan Land Use Map

Figure 7. Zoning Map

GENERAL NOTES:

- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS INCLUDING THOSE CONTAINED IN LAKE COUNTY CODE CHAPTERS 8.10, 12.02, 13.01, AND 15.05.
- 2. A COPY OF THE APPROVED PLAN MUST BE AVAILABLE ON-SITE AT ALL TIMES.
- 3. CONTRACTOR SHALL CONTACT THE DEPARTMENT OF PUBLIC WORKS AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR AN ON-SITE PRE-CONSTRUCTION MEETING.
- 4. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AT 800-227-2600 FOR UTILITY LOCATION BEFORE EXCAVATION WORK.
- 5. TO ALLOW FOR INSPECTION, ALL WORK IS TO BE PERFORMED DURING DAYLIGHT HOURS ONLY, MONDAY THROUGH FRIDAY, EXCLUDING COUNTY HOLIDAYS.
- 6. CUT SLOPES SHALL BE NO STEEPER THAN 2:1 (HORIZONTAL TO VERTICAL); FILL SLOPES SHALL BE NO STEEPER THAN 2:1 (HORIZONTAL TO VERTICAL). A GEOTECHNICAL REPORT MUST BE SUBMITTED FOR CUT AND FILL SLOPES IN EXCESS OF 2:1.
- 7. ESTIMATED QUANTITY OF CUT MATERIAL IS 180 CUBIC YARDS
- 8. ESTIMATED QUANTITY OF FILL MATERIAL IS 180 CUBIC YARDS.
- 9. FILL MATERIALS SHALL BE COMPACTED TO A RELATIVE COMPACTION OF NOT LESS THAN 95% UNDER PAVED AREAS, AND 90% UNDER ALL OTHER FILL AREAS. TEST RESULTS AND A DESCRIPTION OF THE TEST METHOD USED SUBMITTED BY A LICENSED CIVIL ENGINEER ARE REQUIRED AS EVIDENCE OF COMPLIANCE.
- 10. CONTRACTOR IS TO IMPLEMENT BEST MANAGEMENT PRACTICES (BMPS) TO CONTROL EROSION AND REDUCE THE OFF-SITE DISCHARGE OF SEDIMENT TO THE MAXIMUM EXTENT PRACTICABLE.
- 11. EROSION CONTROL BMPS SHALL BE IN PLACE AND MAINTAINED ALL YEAR ROUND.
- 12. CONTRACTOR SHALL KEEP ADJOINING PUBLIC STREETS FREE OF DIRT, MUD, AND OTHER PROJECT RELATED DEBRIS THROUGHOUT CONSTRUCTION. ANY DAMAGE TO PUBLIC STREETS OR ROADWAYS SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE
- 13. DUST GENERATION MUST BE MINIMIZED AND A WATER TRUCK MUST BE AVAILABLE ON-SITE FOR ADEQUATE DUST CONTROL
- 14. AN ENCROACHMENT PERMIT IS REQUIRED BEFORE DOING ANY WORK IN THE COUNTY RIGHT-OF-WAY.
- 15. CONTRACTOR SHALL PROVIDE APPROPRIATE MEASURES FOR TRAFFIC CONTROL AND PUBLIC PROTECTION IN ACCORDANCE WITH THE COUNTY CODE AND THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
- 16. SURVEY MONUMENTS SHALL BE RE—ESTABLISHED BY A LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE IF DISTURBED DURING CONSTRUCTION.
- 17. CONSTRUCTION STAKING IS TO BE IN PLACE PRIOR TO BEGINNING OF CONSTRUCTION AND IS TO BE MAINTAINED OR REPLACED AS NEEDED FOR CONSTRUCTION PURPOSES. MINIMUM CONSTRUCTION STAKING FOR ROADWAYS INCLUDES THE BC, EC, BVC, PVI, AND EVC OF ALL CURVES AND AT 50-FOOT INTERVALS. FIELD LOCATE AND DELINEATE EASEMENTS, RIGHTS-OF-WAYS, AND PROPERTY LINES.
- 18. ALL REQUIRED LOCAL, STATE, FEDERAL PERMITS SHALL BE OBTAINED PRIOR TO CONSTRUCTION AND COPIES OF ALL SUCH PERMITS SHALL BE AVAILABLE ON-SITE.
- 19. IF MORE THAN ONE ACRE OF GROUND IS DISTURBED. THE CONTRACTOR MUST APPLY TO THE CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD FOR COVERAGE UNDER THE STATE'S "STORM WATER DISCHARGE PERMIT FOR CONSTRUCTION ACTIVITIES" AND COMPLY WITH ALL ASSOCIATED PERMIT REQUIREMENTS.
- 20. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE, AND SHALL BE RESPONSIBLE FOR CONDITIONS OF ALL WORK AND MATERIALS, INCLUDING THOSE FURNISHED BY SUBCONTRACTORS. HE WILL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER OF ANY DISCREPANCIES.
- 21. ALL MATERIALS USED FOR SITE CONSTRUCTION MUST BE INSTALLED PER
- MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS.
- NOTES ON THIS SHEET.

22. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL

- 23. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS AS REQUIRED.
- 24. THE CONTRACTOR SHALL LEAVE THE SITE FREE FROM ALL CONSTRUCTION DEBRIS.
- 25. NOTE REGARDING EARTHWORK: EVERY EFFORT HAS BEEN MADE TO PROVIDE A DESIGN TO ACHIEVE A BALANCED SITE, HOWEVER, REALM DOES NOT WARRANT OR GUARANTEE A BALANCED SITE. FACTORS AFFECTING A BALANCED SITE INCLUDE THE FOLLOWING: SOILS FACTORS (VOLUME CHANGE), TYPE AND EXTENT OF UTILITY TRENCHES, SUBGRADE DEPTHS. PAD GRADING AND LANDSCAPE TREATMENTS. THE CONTRACTOR SHOULD MAKE HIS OWN ESTIMATES OF EARTHWORK QUANTITIES AND RELY ON THEM. THE CONTRACTOR SHOULD ALSO MAKE PROVISIONS FOR AN IMBALANCE BY IDENTIFYING ON—SITE OR OFF-SITE DISPOSAL OR EXTRACTION SITES, AND BY PROVIDING REASONABLE CONTINGENCIES FOR PAYING FOR SUCH WORK.

26. CONTOUR INTERVAL IS 5'

I. REMOVE SURFACE DEBRIS.

- 2. DEMOLISH AND REMOVE CONCRETE, PAVING AND ETC. IN CONSTRUCTION AREA.
- 3. CLEAR NEW CONSTRUCTION AREA OF TREES, PLANT LIFE AND GRASS.
- 4. CONFORM TO APPLICABLE CODE FOR DISPOSAL OF DEBRIS.
- 5. COORDINATE CLEARING WORK WITH UTILITY COMPANIES.

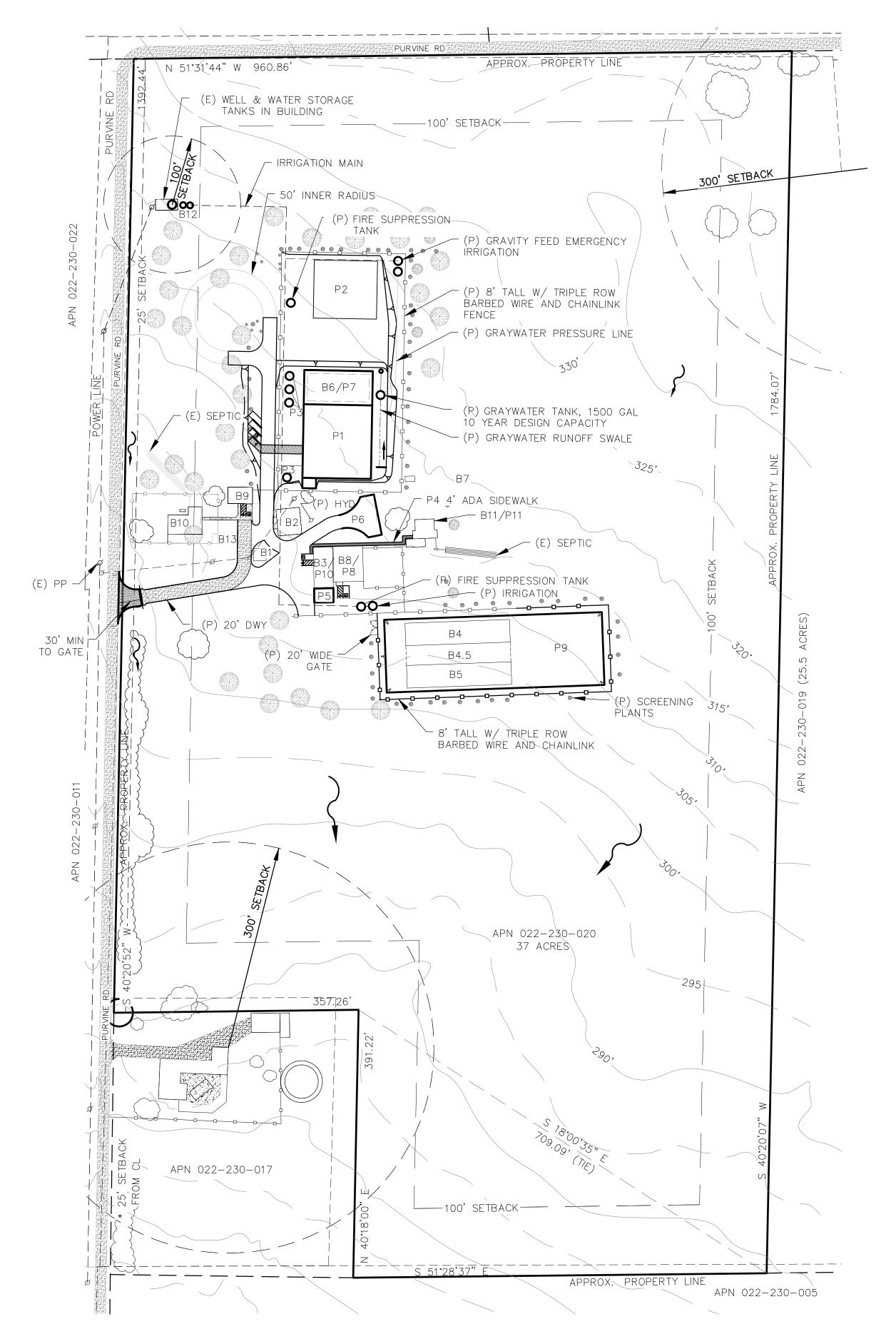
PROTECTION:

1. PROTECT BENCH MARKS, EXISTING STRUCTURES, UTILITIES, FENCES, ROADS, SIDEWALKS, PAVING AND CURBS.

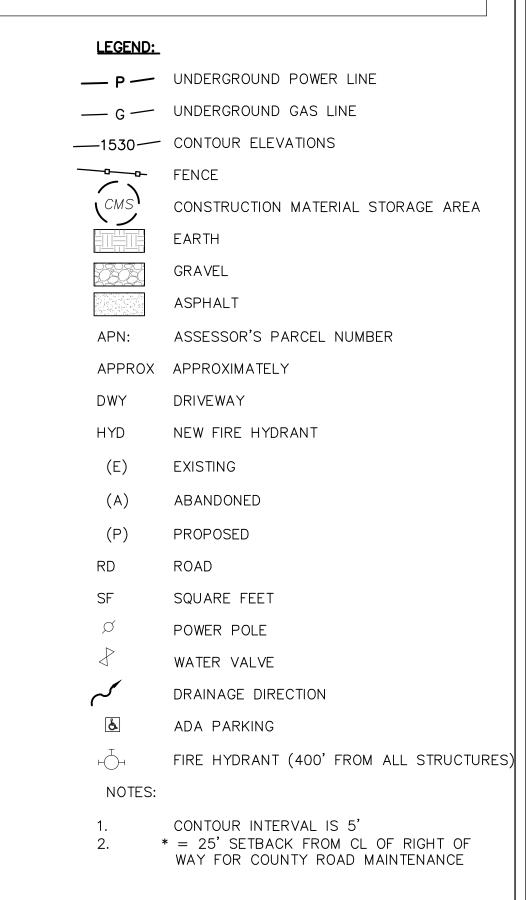
<u>UTILITIES:</u>

- . UPON DISCOVERY OF UNKNOWN UTILITIES OR CONCEALED CONDITIONS, DISCONTINUE AFFECTED WORK; NOTIFY GENERAL CONTRACTOR.
- 2. "POT HOLE" EXISTING UTILITIES TO VERIFY DEPTH. RELOCATE UTILITIES AS NECESSARY TO MAINTAIN A MINIMUM COVER UNDER PROPOSED ROADWAY. CHECK WITH PROPER UTILITY COMPANIES FOR RELOCATION PROCEDURES.
- 3. ALL UTILITY SERVICE AND JUNCTION BOXES SHALL BE ADJUSTED TO GRADE.
- 4. COMPLETE ALL UTILITY RELOCATION PRIOR TO START OF ROAD WORK.
- 5. UTILITIES SHOWN ON THESE PLANS ARE FROM SURFACE EVIDENCE OR RECORD INFORMATION ONLY. POTHOLE AND FIELD VERIFY THEIR LOCATION PRIOR TO THE START OF CONSTRUCTION. REALM WILL NOT ASSUME RESPONSIBILITY FOR UNDERGROUND LINES.

DEMOLITION SCHEDULE FOR GRADING AND DRAINAGE & **EROSION CONTROL PLANS**



EXISTING	BUILDING SQ.FT.	DEMO	PROPOSED USE OR AREA
B1	289 SF	Χ	EQUIPMENT STORAGE AREA
B2	1,720 SF		EQUIPMENT STORAGE AREA
B3	1,440 2,408 SF		F1 OCCUPANCY-PROCESSING AND FINISHED PRODUCT STORAGE
B4		Χ	POULTRY BARN
B4.5	8,320 SF	V	FORMER POULTRY BARN AREA
B5	4,800 SF	X	POULTRY BARN
B6	6,000 SF 704 SF	Χ	LIVE STOCK BARN
B7		V	(DEDLACE WITH METAL DUUDING 47'VEO')
B8	2,236 SF 792 SF	Χ	(REPLACE WITH METAL BUILDING 43'X52') GARAGE TO BE CONVERTED TO SECURITY OFFICE
B9 B10	792 SF		PRIMARY RESIDENCE
B10 B11			GUEST RESIDENCE
B12	901 31		WELL WITH PUMP AND WATER STORAGE BUILDING
B13			STORAGE SHED IN RESIDENCE YARD
210			G FORM OF GIVED IN TREGIBEROE THURS
PROPOSE	D BUILDING SQ.FT.		PROPOSED USE OR AREA
P1	10,343 10,612 SF		MIXED LIGHT GREENHOUSE
P2	7,800 SF		WASTE HOLDING AREA, COMPOSTING AND SOIL RECLAMATION
P3	4 QTY		10,000 GALLON IRRIGATION—RAINWATER TANKS
P4	650 SF		ADA SIDEWALK FOR WORKERS
P5	575 SF		NON CANNABIS WASTE HOLDING
P6			PER SONOMA COUNTY FIRE SAFE STANDARDS, ORDINANCE
			NO.5905, SEC $13-36(C)$ FIRE TURN AROUND.
P7	5,000 SF		INDOOR CULTIVATION
P8	3,611 2,236 SF		F1 DRYING & HAZMAT STORAGE
P9	28,560 SF		OUTDOOR CULTIVATION
P10	1,440 2,408 SF		F1 OCCUPANCY—PROCESSING AND FINISHED PRODUCT STORAL
P11	901 SF		ADA BATHROOM, OFFICE AND EMPLOYEE BREAK AREA



THIS PLAN WILL NOT IMPOSE A DRAINAGE, GRADING OR FLOODING HAZARD TO ITSELF AND SURROUNDING PROPERTIES.

JASON B. VINE, P.E.

LICENSE NO: C67800

EXPIRATION DATE: 06-30-19

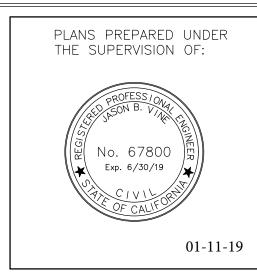
DATE

THE NORTH AMERICAN DATUM OF 1983 (NAD 83) IS THE HORIZONTAL CONTROL DATUM FOR THE UNITED STATES, BASED ON A GEOCENTRIC ORIGIN AND THE GEODETIC REFERENCE SYSTEM 1980 WAS USED FOR THIS SURVEY. VERTICAL ELEVATION IS NAD 88 AND WAS ESTABLISHED WITH SURVEY GRADE GPS.

PLANS REVIEWED OR APPROVED BY:

SONOMA COUNTY ENGINEER





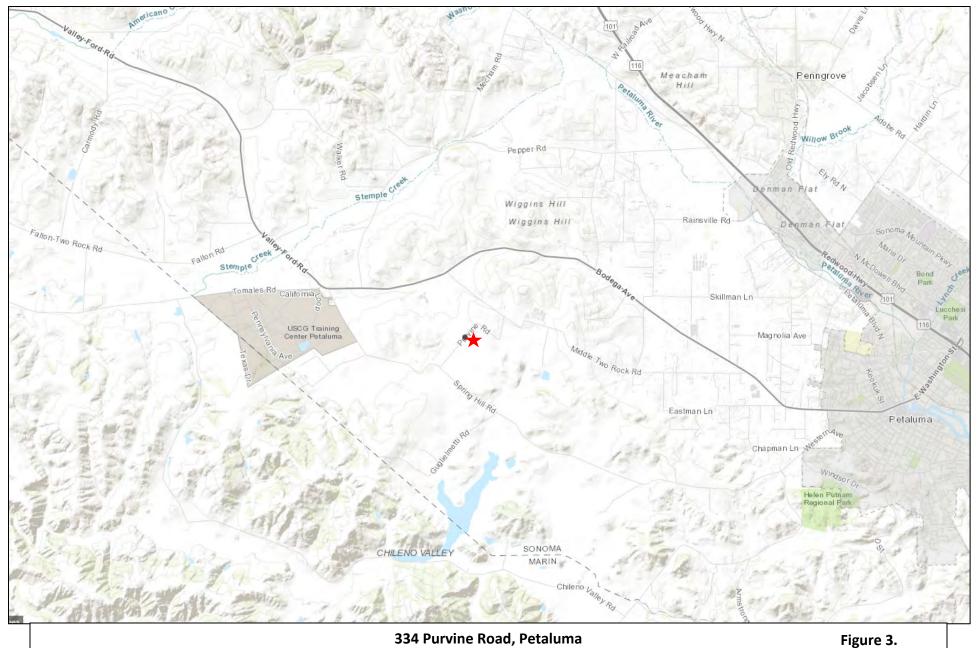
FARM CILITY AA HILLS TION FA PETALUMA CULTIVATIC

Figure 1. Site Plan

၁.	Revision	Date			
Project Manager					
PETER STANLEY					
Drawn by Checked by					
		МІТСН СС	NNER		
Date					
10.11.2018					
Filename					
PURVINE-12-10-18.dwg					
Job Number					
202-1701					
Sh	eet				
	01.0				







334 Purvine Road, Petaluma UPC17-0020 Petaluma Hills Farm – Greenhouse, Indoor, and Outdoor Cannabis Cultivation

Vicinity Map



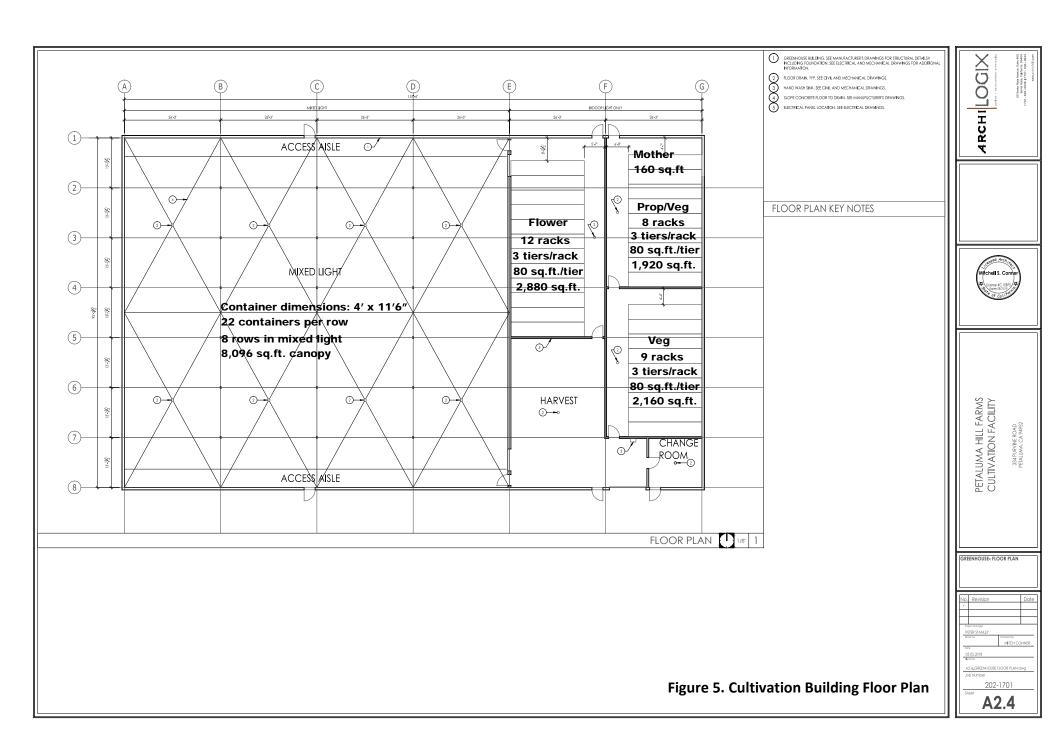




Figure 6. General Plan Land Use Map

Numbers on map indicate maximum density in Acres/Unit, except Urban Residential where numbers indicate Units/Acres.

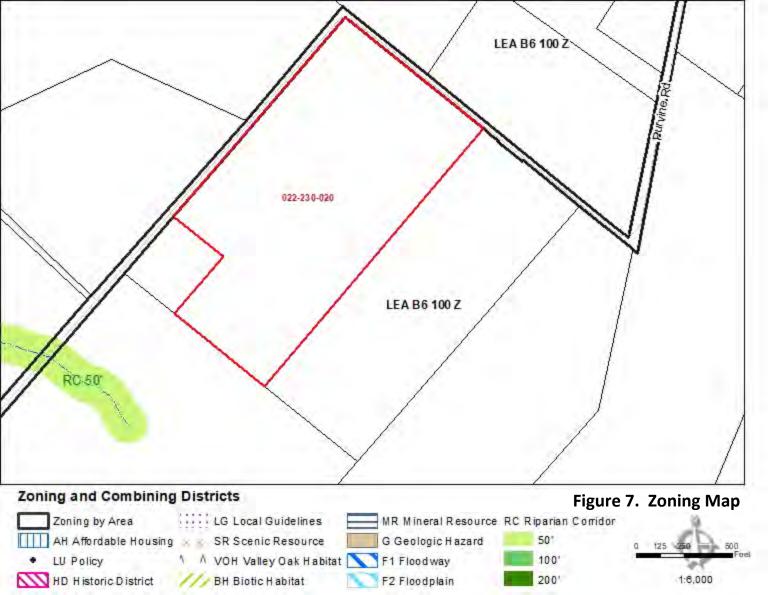


EXHIBIT C

Public Comments Agencies



Sonoma County Sheriff's Office

March 28, 2019

MARK ESSICK Sheriff-Coroner

CLINT SHUBEL Assistant Sheriff Law Enforcement Division

ALAN VERNON Assistant Sheriff Detention Division

Board of Zoning Adjustments Permit Sonoma 2550 Ventura Avenue Santa Rosa, CA 95403

Regarding: 334 Purvine Rd.

Attention: Arielle Kohn:

Over the last two years, the Sonoma County Sheriff's Office has been engaged in discussions with Permit Sonoma about best security practices when it comes to permitted cannabis operations in Sonoma County. During the process of developing security guidelines for cannabis operators, the Sonoma County Sheriff's Office reviewed several sample security plans submitted by local cannabis applicants.

The purpose of our review was to weigh in on security issues from a law enforcement perspective and offer input to Permit Sonoma on best practices that we felt should be prioritized by cannabis applicants when it comes to operational security. Permit Sonoma took many of our recommendations and incorporated them into their cannabis operator security guidelines in place today.

One security plan that I personally reviewed was that of Petaluma Hills Farm located at 334 Purvine Rd. I also met in person with the Chief Operating Officer, Samuel Magruder, to discuss the planned operation and his company's philosophy on operational security. I have to admit that I was impressed with the amount of deliberate planning and attention to detail that Mr. Magruder had put into his operational security plan. The Petaluma Hills Farm security plan clearly incorporated the most current and best practices for security as it relates to cannabis operators. I understand that for some, cannabis operations in Sonoma County continues to raise local opposition, however after reviewing Petaluma Hills Farm security plan, I do not have any objections to their proposal from a security / public safety point of view.

Sincerely,

MARK ESSICK Sheriff-Coroner



March 28, 2019

Sonoma County Permit and Resource Management Department Crystal Acker 2550 Ventura Avenue Santa Rosa, CA 95403

Re: Initial Study/Mitigated Negative Declaration (IS/MND) (SCH#2019039068) – Petaluma Hills Farm, LLC, Cannabis Cultivation Operation

Dear Ms. Acker:

Thank you for providing the California Department of Food and Agriculture (CDFA) CalCannabis Cultivation Licensing Division (CalCannabis) the opportunity to comment on the Initial Study/Mitigated Negative Declaration (IS/MND) (SCH#2019039068) prepared by Sonoma County for the proposed Petaluma Hills Farm Cannabis Cultivation Operation Project (Proposed Project).

CDFA has jurisdiction over the issuance of State licenses to cultivate, propagate and process commercial cannabis in California. CDFA issues licenses to outdoor, indoor, and mixed-light cannabis cultivators, cannabis nurseries and cannabis processor facilities, where the local jurisdiction authorizes these activities. (Bus. & Prof. Code, § 26012, subd. (a)(2).) All commercial cannabis cultivation within California requires a cultivation license from CalCannabis. For a complete description of license requirements contained in the CalCannabis Cultivation Licensing Program regulations, please visit:

https://static.cdfa.ca.gov/MCCP/document/CDFA%20Final%20Regulation%20Text 0 1162019 Clean.pdf.

CDFA certified a Program Environmental Impact Report (PEIR) for its cannabis licensing activities on November 13, 2017. The PEIR can be found at the following link: https://www.cdfa.ca.gov/calcannabis/PEIR.html. The PEIR provided an evaluation at a statewide level of the types of impacts expected to be caused by cannabis cultivation, including the cumulative impacts that would be expected under the CalCannabis Cultivation Licensing Program.

The PEIR did not consider site-specific impacts that could result from individual cultivation operations seeking licensure by the State. The PEIR did, however, provide local governments a Tiering Checklist (Appendix J) to assist with making determinations as to what additional CEQA analyses and Lead Agencies are encouraged to use the Tiering Checklist as a first step in determining which CEQA topics were determined by CDFA to be most appropriately addressed by local jurisdictions.

If Sonoma County issues a permit for the Proposed Project pursuant to its cannabis ordinance and an application is submitted to CDFA, the agency will conduct an independent review of the application, including the CEQA compliance document provided. If CDFA determines that the CEQA document is adequate for its use, CDFA will act as a Responsible Agency using that document to comply with CEQA for its issuance of the license. If CDFA determines that the CEQA document is not adequate for its use, CDFA may choose to act as a Lead Agency and to prepare a separate CEQA document for the project, as appropriate under CEQA Guidelines section 15096(e).

The following comments are provided to ensure CEQA documentation for the Proposed Project is sufficient to satisfy CDFA's obligations as a Responsible Agency under CEQA Guidelines section 15096 related to its potential future action related to the issuance of a cultivation license for the Proposed Project.

CDFA requests that a copy of the IS/MND, revised to respond to the comments provided in this letter and a signed Notice of Determination be provided to the applicant, so the applicant can include them with the application package they submit to CDFA. This should apply not only to this project, but to all future CEQA documents related to cannabis cultivation applications in Sonoma County.

Responsible Agencies/Permits

The IS/MND includes a list of responsible and trustee agencies and environmental permits that may be required for the Proposed Project. (ISMND p. 2.) Please add the requirement that cultivators are required to obtain either a Lake and Streambed Alteration Agreement (LSAA) from the California Department of Fish and Wildlife (CDFW) or a written verification that one is not required. (Bus. & Prof. Code §§ 26012, 26060.1(b)(3).)

Environmental Finding

CDFA requests that a signed copy of the IS/MND and a signed NOD (when issued) be provided to the applicant for submittal to CDFA as part of an annual license application.

Acknowledgement of CDFA Cannabis Cultivation Regulations

CDFA requests that the analysis of resource topics in the IS/MND acknowledge all pertinent requirements contained in CDFA's regulations for cannabis cultivation, pursuant to the Medicinal and Adult Use Cannabis Regulation and Safety Act (MAUCRSA), including environmental protection measures related to aesthetics, cultural resources, pesticide use and handling, use of generators, energy restrictions, requirements to conduct Envirostor database searches, and water supply requirements, as appropriate. These requirements are detailed in CDFA's cannabis cultivation regulations (link provided above).

Resource Topics Added to 2019 CEQA Guidelines

On December 28, 2018, the Governor's Office of Planning and Research issued revised CEQA Guidelines (14 Cal. Code of Regs. §15000 et. seq.) including a revised Appendix G checklist. These revised Guidelines include some reorganization intended to reduce redundancies, but also incorporate changes resulting from legislation and case law since the prior update. The IS/MND prepared by Sonoma County does not include two CEQA topics included in the updated Appendix G checklist, Energy and Wildfire. While there is some discussion of fire protection impacts in the Hazards section and of energy use in the Greenhouse Gas Emissions section, this IS/MND and all future CEQA documents prepared by Sonoma County for cannabis cultivation projects should evaluate whether operation of the cultivation project would result in any significant impacts related to these topics, and propose mitigation, as applicable. A copy of the new Appendix G checklist can be found at: https://www.califaep.org/index.php?option=com_content&view=article&id=111&Itemi

Conclusion

d = 258.

CDFA appreciates the opportunity to provide comments on the IS/MND for the Proposed Project. If you have any questions about our comments or wish to discuss them, please contact Kevin Ponce, Senior Environmental Scientist Supervisor, at (916) 263-0801 or via e-mail at kevin.ponce@cdfa.ca.gov.

Sincerely,

Lindsay Rains

Licensing Program Manager

EXHIBIT C

Public Comments Public in Opposition

To: Crystal Acker
Project Planner III
County of Sonoma PRMD
2550 Ventura Ave, Santa Rosa

From: Autymn Garvisch (Condit) and W. Forrest Condit

RE: UPC 17-0020, PUBLIC COMMENT FOR COMMERCIAL MARIJUANA AT 334 PURVINE ROAD

County Commissioners,

This missive concerns the proposed use permit (UPC 17-0020) for commercial marijuana cultivation at 334 Purvine Road in the countryside of Petaluma, CA. While we do not currently live on Purvine Road, we are related to Ayn and James Garvisch and are frequent weekend visitors to our family farm. We have previously lived at 625 Purvine Road and plan to move back sometime in the near future to start a family of our own. In the meantime, we have maintained our ties to the area and are still very involved in the community. As such, we are well equipped to provide informed feedback and compelling reasons why Purvine Road is the wrong location for a marijuana cultivation and processing operation.

Our opposition to this proposed project is twofold: we want the Commissioners to earnestly understand the issues our family and others on Purvine have encountered while the applicants (Sam Magruder, et. al.) illegally grew marijuana and operated canna-tourism activities over the last year and a half. We also want Commissioners to acknowledge that this operation is incompatible with its proposed location on Purvine Road, and therefore that our land-use and neighborhood compatibility concerns cannot be mitigated.

Prior to being granted an injunction against their unpermitted activities, our family was faced with a marked increase in canna-tourism related traffic; for the first time in over ten years, tour buses would travel past our family home throughout the week. Visitors would stop and take photos of our family farm and animals. Given the very poor condition of our one-lane road, inconsiderate drivers and a consistent, high volume of traffic presented a hazard for farm animals and residents alike. We knew that this increase in traffic was due to the unpermitted activities at 334 Purvine Road because vehicles would park along the roadside, sometimes blocking a driver's line of sight.

Unsurprisingly, traffic levels returned to a normal level after the applicants' canna-tourism was enjoined. The conclusion that this commercial cannabis operation will have a "..less than significant impact on traffic" is predicated on a faulty premise. Purvine road is peppered with deep potholes and has been reduced to dirt in some sections. It is in such poor condition that it can barely support the few existing agricultural businesses in the area. Increased traffic for their commercial marijuana workforce and for tertiary activities (future tours, special events, farm tours, delivery trucks, etc.) will further compromise the quality of the road and residents' safety. The evidence of the past year more strongly supports this conclusion than the traffic estimates contained in the mitigated negative declaration.

We also have concerns regarding the preservation of natural and cultural resources in the area. Purvine Road is a part of the historic Petaluma Dairy Belt and is known for traditional dairy and beef cattle ranching. Many local families have ranched on this road for the last century and are intimately aware of the scarcity of water. Growing up at the farm, it was not uncommon for our well to run dry. This is why our area is zoned for low water use; while zoned land-extensive agriculture (LEA) there are few agricultural projects that can thrive in our water-scarce valley. Water-intensive and commercial-scale marijuana cultivation and processing is no exception to this rule. In our opinion, the mitigated negative declaration grossly underestimates the amount of water this proposed operation would need. Likewise, this document overestimates the water availability of the area and relies too heavily on the unsubstantiated water-use data provided *by the applicants*. Given the intense demands this proposed project would place upon the natural and cultural resources of the area, the established ranching businesses and the surrounding families will likely not have enough water to sustain themselves.

The impact this project will have on the social fabric of the greater Middle Two Rock community and the security, safety, and enjoyment of the surrounding residences is indisputable. Since the Commission is tasked with considering how this project will impact the social welfare of the area, we implore commissioners to consider how irresponsible it would be to approve this project. Not only would approving this type of land-use have a significant and irreversible impact on the area for generations to follow, but it would be irresponsible to grant a cultivation permit to applicants who have engaged in previous criminal activity outside of marijuana cultivation. Since purchasing the property at 334 Purvine Road, Sam Magruder, et. al. have shown a blatant disregard for the concerns of the surrounding neighbors and for the current cannabis ordinance. While they were hosting illegal canna-tourism events in the summer of 2018, we could smell burning marijuana from nearly a quarter mile down the road as guests indulged at their hobby farm property. The evidence of their tours and events would often linger for days, usually memorialized by litter left alongside the road.

Purvine Road is in a remote and unincorporated area; it is under the jurisdiction of the Sonoma County Sheriff's department which, because of the size of their jurisdiction, has a high emergency response time whenever we call for help. The sheer number of recent marijuana-related home invasions and murders in Sonoma County show that law enforcement cannot ensure the safety of neighboring properties surrounding this high-profile target. Furthermore, whatever protection measures the applicants install will forever change the landscape and heighten awareness of their operation. The cameras they have currently installed appear to look out across a neighbor's home and are a grim reminder of the security issues posed by marijuana cultivation in a remote area such as Purvine.

We hope this letter paints a clear and compelling picture of the staunch opposition the surrounding community has to this proposed project. We love our family farm and friends on Purvine Road. Only a denial of the project from the Commission can preserve the years of memories and happiness we have, and ensure that Purvine will be worth returning to. We hope to raise our future children on our family farm and pass along the values of land stewardship and community that we hold dear.

Sincerely,

Autymn Garvisch (Condit) and W. Forrest Condit

Crystal Acker

From: Joi Losee <alpacaz@pacbell.net>

Sent: March 30, 2019 10:07 PM

To: Crystal Acker Subject: Purvine Road

Commercial Cannabis does not belong on Purvine.

The people do not want the Cannabis in their neighborhood.

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

Warning: If you don't know this email sender or the email is unexpected, do not click any web links, attachments, and never give out your user ID or password.

Vernon S. Piccinotti 3700 Spring Hill Road Petaluma, California, 94952

March 26, 2019

Ms. Chrystal Ackerman c/o Sonoma County Permit and Resource Department (PRD) 2550 Ventura Ave. Santa Rosa, CA., 95403

Dear Ms. Ackerman,

I am directing this letter to you with the understanding that you are the responsible party at PRD for coordinating information concerning a hearing currently set for Thursday, April 11, relating to permitting a marijuana growing operation at 334 Purvine Road, Petaluma. Please convey this letter timely to appropriate parties.

I cannot too strongly take issue with dope dealers being permitted to move into this quiet agricultural community which is the home of numerous third generation residents who still pursue a variety of agricultural activities and a generally quiet lifestyle. This applicant is already subject to a court injunction against ongoing illegal activity on the property sought to be permitted.

The related issues of excessive water consumption, chemical application, lights, traffic and potential attraction of unsavory characters-invited or not-is completely incongruent with this quiet pastoral setting. We note with great concern recent local home invasions by individuals who seek marijuana product and/or proceeds.

Sonoma County once had the opportunity to opt out of this sordid business but apparently could not muster the strength to pass up the presumed resultant tax windfall. Principal too often overrules principle. At this late hour you still have the option to confine this activity to industrial areas where it will blend in and no one will likely care. Please do not inflict this upon our beautiful Two Rock Valley.

Very truly yours

Vernon S. Piccinotti

Vernon S. Piccinott.

Crystal Acker

From: Jim Bracco <jim@braccos.com>

Sent: April 01, 2019 1:45 AM

To: Crystal Acker Cc: Ayn Garvisch

Subject: Objections to Proposed Cannabis Permit at 334 Purvine Road (UPC17-0020)

Dear Ms. Acker:

Objections to Proposed Marijuana Cultivation at 334 Purvine Road

The proposed commercial marijuana cultivation permit at 334 Purvine Road (UPC17-0020) should be denied for the reasons discussed below. The proposed activity is incompatible with the rural residential character of the area and diminishes the quality of life of other residents on that road.

Most residents of the Dairy Belt believe that it should be designated a cannabis exclusion zone. The Board of Supervisors has thus far refused to allow exclusion zones despite the fact that seventy percent of Sonoma County voters think that individual communities should be granted the power to create exclusion zones that ban commercial marijuana cultivation.

Before the County can approve any conditional use permit under the Zoning Code, it must find that the proposed use is not detrimental to the health, safety, peace, comfort or welfare of the neighborhood or the general public. Sonoma County Code section 26-92-070(a). In addition, under section 26-88-250(f), the standard is more specific for issuance of a commercial cannabis permit. Any grow operation: shall not create a public nuisance or adversely affect the health or safety of nearby residents or businesses by creating dust, light, glare, heat, noise, noxious gasses, odor, smoke, traffic, vibrations, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, runoff or wastes."

No reasonable decision maker could make this finding about a commercial cannabis cultivation project on Purvine Road. The county's population is about 500,000, and County officials estimate there are about 5,000 growers (99 to one). There is no history of commercial marijuana cultivation on Purvine Road before the Cannabis Ordinance was adopted, and here the discrepancy between the number of growers and non-growers is even more skewed.

The operators had no connection with Purvine Road before the Cannabis Ordinance was adopted. It should be easy to weigh the interests of Purvine Road residents, whose health, safety, peace, comfort, and general welfare should be paramount, against individuals whose sole interest in disturbing the peaceful community is to maximize profits in a lucrative and disruptive commercial activity. This project grow essentially uses the Purvine Road neighborhood as a shield to hide from criminals who invade homes to steal cash or marijuana.

Commercial cannabis production is an inappropriate land use and enterprise for rural Sonoma County.

Purvine Road is the wrong place for a commercial cannabis operation. This facility will be less than 600 feet from a home with young children

Purvine Road is 1 mile long, with 8 family homes along it. You can see the subject property clear as day from all directions, and all neighbors on the road will all be negatively impacted, by the smell, traffic, noise, view, water, and attention this operation will draw.

Purvine Road is severely pot holed, narrow, winding, and in very poor overall condition. This marijuana business that will operate 24/7, will be surrounded by eight-foot fences topped with barbed wire, and will

include security lights, ten large water storage tanks, commercial HVAC systems, and will greatly increase truck and employee traffic on this insufficient surface street.

The applicant blatantly violated state and local law by launching its Purvine Road operation without a County cannabis permit or a state cannabis license.

The applicant used its unlicensed grow to launch a cannabis tourism operation in violation of the County Code. Their own advertisements, Internet and social media postings show that it was giving tours of its operation without a permit or license.

The applicant stopped violating the rules only when the neighbors sued and obtained a court order prohibiting the illegal conduct.

The applicant has renovated the property for the purpose of hosting visitors and events, including space for group dinners and a bar. The applicant advertised the property as available for parties and events for up to 250 attendees at a minimum price of \$8,000 per day.

The applicant's attempt to transform a peaceful stretch of the Petaluma Dairy Belt into a cannabis tourism destination, event center and retreat shows disrespect for the neighborhood and a belief that the applicant is above the rules.

The applicant provided a number of misleading statements in its application, including grossly underestimated water use figures and claims that its principals were Sonoma County residents, when in fact they are not.

Principal applicants history: In 2016, the SEC fined and suspended the securities license of the applicant's CEO, Mike Harden, for insider trading, a serious crime, and required Harden's company to disgorge profits and pay penalties of \$8.9 million. In 2007, the ABC suspended the license of Magruder&Crum LLC (Principal applicant Sam Magruder) for serving alcohol to minors and also serving intoxicated persons and allowing minors into the bar.

The above facts are more than enough to warrant denying this permit application.

-James Bracco Two Rock Valley

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

The Jensen Family 250 Purvine Road Petaluma, CA, 94952

March 27, 2019

Ms. Crystal Acker PRMD 2550 Ventura Ave Santa Rosa, CA, 95403

Dear Ms. Acker,

It is horrifying to my husband and me that we could potentially have a cannabis growing and processing plant 300 feet from our property line. Last summer the owners of 334 Purvine Road grew approximately 1,000 square feet of cannabis plants outdoors, and even though the plants were approximately 600 feet away from our home, we could still smell cannabis. It was an overwhelming strong smell that forced us to retreat inside our home. The applicants do not have a permit to grow cannabis and yet they felt they were above the law and grew anyway.

I am sure that with most projects you review for approval, you are forced to listen to complaining neighbors, but I hope that you can realize the devastating impact this project will have on our lives. What is proposed to go in at 334 Purvine is a new kind of beast for the county; it is an experiment to see whether cannabis can be grown next to family homes. Please do not make my family, neighbors and the Two Rock Valley an experimental dumping ground for commercial cannabis grows, cannabis processing plants, and cannatourism.

We have two children, Garrett, a freshman at Petaluma High School, and Gavin, an adventurous two year old. Garrett is active in FFA and the local Two Rock 4H Club. Garrett also competes in the event of cutting in District 5 High School Rodeo. He is a teenager who spends his time outside with his animals, preparing for competition. Garrett has already been affected by the cannabis at 334. No longer will his friends' parents allow the children to come over and hang out. They are fearful and honestly don't want the children outside smelling the cannabis.

Our home is our dream home in our dream location. We have spent the last six years slowly fixing it up. It has been the gathering place for many birthdays, Christmas dinners, and swim parties. Now it is hard to realize that no longer will we have neighbors next to us but rather a cannabis factory. No longer will my husband and I be able to live in our hometown; we will be forced to sell our home and leave the area.

I am a registered nurse and work at a dual diagnosis treatment center. My husband and I are not against cannabis. We just feel very strongly that it should not be grown and processed in neighborhoods. The people receiving licenses should be the best of the best that

the cannabis industry has to offer. Given their history of violating the County's cannabis rules by growing without a license and hosting cannabis tours and events, these applicants do not meet that standard.

My husband works for PG&E and is on call as a Troubleman/First Responder twenty-four hours a day, which means I am often home alone with the children. Recently, my husband and I were told by a sheriff deputy that, with a cannabis grow next door, we should become familiar with how to use a gun. Most likely, he explained, we will need to handle situations by ourselves by the time law enforcement could arrive. Basically, we are on our own to protect ourselves. Several times this last year we have called law enforcement when activity at the applicant's illegal grow made us feel uncomfortable.

I found it interesting and telling of Mr. Magruder's true character that he claimed in his report to the county that my husband and I requested the fence between our properties. We did not request this fence. The fence was installed after I called the county regarding construction at 334 Purvine. Our shared property line is 320 feet long, but the fence is approximately 165 feet long. It was also installed approximately four feet from our property line. It is the most out of place, strange-looking fence in the dairy belt. In fact, many people that pass ask why we put that fence up. They are shocked when we tell them the cannabis operation installed the fence. Last year this fence line was not maintained, and grass grew approximately three feet tall.

On October 25, 2018 a reporter, Wayne Freedman, visited my home to interview myself and neighbors. It was after this interview that the applicants planted bamboo between our property lines. Bamboo is an invasive, non-native plant. This rat-attracting plant was placed in the ground next to our horse pens and livestock barn, which means our barn will soon become infested with rats. Soon that bamboo will be spreading over onto our property.

The applicants often refer to themselves as stewards of the land. However, they left plastic bamboo containers piled up along our fence line, which have been there for months. But the strange fence, invasive bamboo, and pile of containers do not complete our shared fence line. After I testified about the owners' illegal grow and cannabis tourism activities in a deposition, the owners installed cameras at the entrance of my home and at the end of the shared property line. The cameras look like what you would find in a prison. There are no other visible cameras on the property, only what was placed next to our home. All of this feels like intimidation for us to stay quiet and behave while they break the rules, and the county fails to offer any protection to neighbors. This behavior by the applicants hardly makes us feel comfortable to be outside enjoying the beauty of the dairy belt.

More recently on February 24, there was a sheriff vehicle at 334 at approximately 10:00 in the morning. I took a picture of the sheriff's car for evidence. Since that incident, Jared Rivera, the property manager at 334, started filming my husband and me when we drove by the property at 334. Jared Rivera now stops outside my home and points at me from his truck while I am inside my home. This behavior is hardly neighborly and makes me fearful of what they will do to us if they are given a permit.

Another unsettling event happened when we saw someone walking through the cannabis field at night with a flashlight and heard gunshots. This event was the most frightening for many reasons. First, the applicants did not have a permit to grow cannabis. Second, as we understand the cannabis ordinance, there are not supposed to be guns on the property. We didn't know if they were being robbed and if that violence would soon spread over to our

house. Would my family members and I be the next cannabis victims written about in the Press Democrat?

I would also like to point out that Sam Magruder was not responsible with his liquor license. His license was suspended after he sold alcohol to minors yet he is now being considered for a Sonoma County Cannabis Permit. How can you give someone with such a poor track record a cannabis permit and allow his business to be located next to families?

I hope this letter gives you some insight into how strongly we oppose a commercial growing and processing plant that has intentions of operating twenty-four hours a day next to our home. Let's be honest: the applicants have a bigger vision than just growing cannabis. They have already renovated this once-agricultural property for dinners and events. They want to sell a cannabis lifestyle, host parties, and sell food infused with cannabis. This is the wrong neighborhood for that kind of operation.

Purvine Road will not withstand the applicant's traffic. Two vehicles are not able to pass each other without one vehicle having to drive into the ditch. Purvine Road is one mile long with approximately seventy-two large pot holes. In certain areas it has almost reverted to a dirt road. In its current condition, the road cannot withstand construction trucks, shipping vehicles, employees, and tourists. It is the county's responsibility to bring the road up to at least minimal standards before considering allowing more traffic on it.

Please hear our cries for help. As a neighborhood, we have worked together, organized, and done everything we can to prove to you that Purvine Road is the wrong place for a cannabis growing, processing and tourist facility. Please choose another location, farther from homes and families, for the county's cannabis experiment.

Sincerely,

Billy & Britt

William and Britt Jensen









April 1, 2019

Crystal Acker Project Planner III Permit Resource & Management Department 2550 Ventura Avenue, Santa Rosa CA 95403

Ms. Acker,

I am writing to provide feedback during the public input period for UPC17-0020 (the proposed use permit for the commercial marijuana operation at 334 Purvine Road in Petaluma)

My name is Curtis Coffin and my wife and I have lived on Middle Two Rock Road, around the corner from Purvine Road, since 1985.

As a resident of Two Rock Valley for over thirty years, and with friends and relatives that have lived here all their lives, we are opposed to this large-scale commercial cannabis operation going in at this location.

After reading the project application and the proposed mitigated negative declaration, I am very concerned about a few of the items discussed and addressed in the report. One of well-known facts of this area is its water scarcity. So water has been a concern and an issue here in the valley for a long time. We have had challenges and disputes among neighbors and with the county. Near by properties to this location have little or no water and have their wells supplying from locations over two miles away from completely separate and noncontiguous properties located off of Middle Two Rock Road. So at this time I am somewhat surprised by this mitigated negative declaration prepared for the 334 Purvine Rd project.

This declaration states that a hydrogeological assessment report was prepared to assess the impact on ground water and neighboring wells. It sates that they have a 6.7 gallon per minute pumping rate for an 8 hour time period at this wells capacity. It also states that this usage would have less than significant impact and that is not in a water scarce zone. I am seriously suspicious and in doubt and wonder can the county guarantee that our precious minimal water supplies will not be jeopardized? I am concerned that this hydrogeological study did not take into account that historically this is a low water area.

My property that is just over the hill from this project has two usable domestic wells that combined only average 4 gallons per minute. These wells are located a very short distance from this property. Some if my neighbors wells that are deeper and better producing, are drawn down in the dry months.

A neighbors' business opportunity, the McClelland's dairy butter and cheese making proposal, was ultimately surrendered due to water restrictions. McClelland's dairy is across from this proposed project. The hydrogeological study lacks sufficient real data that would be helpful in determining the correct area for this project.

According to the declaration, Sam Magruder has 20 years of marijuana cultivation experience and is able to attest to his proposed water usage. Where is this experience detailed? And, considering the history of commercial marijuana cultivation in this State has been illegal all those years, his experience is highly suspect. I would like to see this experience detailed somewhere if it is going to be relied on in this report. A cannabis use permit is unlike any other land use you have issued permit to date and applicants should be properly scrutinized.

Our streets, and this community, are the wrong place for this sort of operation. Since last year, traffic going past my house has significantly increased. Purvine Road is accessed by passing my property via Bodega Avenue and Middle Two Rock Roads. Parts of Middle Two Rock Road are severely potholed and narrow with poor visibility in some areas. There is one section with a small bridge so narrow that it is hard for two cars to pass each other without slowing to a virtual stop. The road cannot stand any more traffic and I am surprised that the traffic study does not take this into account. There has also been a noticeable rise in traffic and serious accidents on our street over the last year. The increase in traffic from this operation will in fact impact the roads and our neighborhoods residents.

I also have concerns about the threat of inviting crime and the possibility of property values being decreased.

Please take this letter into consideration for the April 11th hearing.

Curtis Coffin

4257 Middle Two Rock Road Petaluma CA 94952

From: Deborah Eppstein deppstein@gmail.com

Sent: April 01, 2019 11:15 AM

To: Crystal Acker

Subject: 334 Purvine; UPC17-0020

Dear Crystal,

In reviewing further information on the application for 334 Purvine, UPC17-0020, I have a document dated Jan 17, 2018, entitled "Planning Referral County Fire Comments". Is this the final document for fire safety inspections, or if not, can you please send me the most recent information?

Purvine Road falls in the State Responsibility Area (SRA) for fire protection and as such, must meet certain state and local standards. Some of these are listed in the Jan 17, 2018 report, including:

"To facilitate locating an emergency and to avoid delays in response; all existing and newly constructed or approved roadways and buildings whether public or private shall provide for safe access for emergency fire apparatus and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during an emergency"

Purvine Road does not meet those standards; due to its substandard width, two vehicles cannot pass freely to provide for safe access for fire trucks and civilian evacuation concurrently. To approve a commercial operation on Purvine Road would violate both the State and Sonoma County Fire Safe Regulations.

Please enter this officially into the file and confirm your receipt.

Thanks, Deborah Eppstein 801-556-5004

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

Ayn and James Garvisch

625 Purvine Rd• Petaluma, CA 94952 Phone: 510-813-8866 •

Date: 04/01/19

Crystal Acker
Project Planner III
County of Sonoma PRMD
2550 Ventura Ave

County Commissioners,

We are writing to you on in regards to the proposed use permit for large-scale marijuana cultivation at 334 Purvine Rd Petaluma 94952, UPC17-0020.

Commercial marijuana should not be grown on Purvine Road. It belongs somewhere else, and it is your responsibility to ensure you do not get this wrong. The evidence over the last year and a half has shown that these applicants have broken county code by growing cannabis, and running a full-scale tourist and food operation all based on marijuana. They DO NOT want to only grow marijuana. They want to be a tourist destination directly violating the law and county intentions the cannabis.

The impact of this potential operation has imprinted our whole lives in these past year and a half. I know for a fact that 2 out of the 8 residents of Purine Road will move if this operation goes in. We are seriously considering our future here as well. Is this what you call neighborhood compatibility? As 10-year residents and landowners of 18 acres directly across from this operation on Purvine Rd, we are ashamed of how The County has ignored our concerns, letters, and pleas and gone ahead with issuing this negative declaration.

Not only are we very concerned about this operation in so close to our home, family and property but we continue to have concerns including water, odor, safety and security of our loved ones, the visibility and the massive scale of the proposed project, road traffic and condition. These impacts are real. You do not live here on Purvine. We do.

Below are some of our observations and objections to the proposed negative mitigated declaration that require further study or are contradictory to the document. Some text in back has been copied and pasted form your report.

Existing Site:

They state, existing uses on the parcel include a residence (currently rented), cattle grazing on 25 acres (leased to a nearby rancher). The cattle rancher that had a lease to graze his cows was not allowed grazing the on the scale his lease called for. This lease is currently expired and the cattle rancher is opposed to this operation and will be removing his cattle. A 1-acre chef's garden is leased to SHF Jugo, Inc. and supplies organic produce for restaurant use. SHF JUGO Inc. is a company registered to the applicants business address. It is a company that produces cannabis or CBD infused beverages. Organic vegetables are not the primary use for the leased land as you can see in the company the applicant names that they lease too. The applicant has also renovated the property for the purpose of hosting visitors and events, including space for group dinners and a bar. The applicant advertised the property as available for parties and events for up to 250 attendees at a minimum price of \$8,000 per day.

Odor: They state that NO engineered odor control system is proposed or required for outdoor cultivation. The cultivation site is proposed in a location greater than 200 feet away from the nearest property boundary and greater than 600 feet away from the nearest off-site residence to limit potential for off-site odors. My neighbors' home is only 600 feet away from this grow site. My home is directly down wind from this grow site. The odor is pungent from the time the plants are placed in the ground in April and the smell becomes completely overwhelming and unbearable from August through much of October and in to November if the plants are being dried on the property. There are multiple examples all over Colorado, Washington, and now California of residents suffering from the pungent odor of cannabis that seeps into homes and does not dissipate. You should not be using an example of poultry or swine. Fencing and landscaping doesn't deflect the odor plume upwards. What research are you using to verify or substantiate this claim? What research has been done on cannabis odors? When have mitigations such as these been effective to eliminate odor from an outdoor grow? Where is the research on this?

Support Facilities:

Proposed landscaping: They state in front of the fence would consist of rose bushes planted along the fence on exterior sides (facing Purvine Road & neighbors to the southwest). Drought-tolerant, fire-resistant, trees and shrubs would then be planted in front of the roses. With the openness of the land and how it is literally looked down on from all nearby roadways, nothing will hide the fencing or grow.

They state a new 8-foot wood fence was also recently constructed between the project property and their neighbors to the southwest, at the neighbor's request. This is a lie, the neighbor does not want the fencing they installed and did not ask for it.

Area and Surrounding Businesses

They state that the parcel is located in an unincorporated, rural agricultural area in the Petaluma Dairy Belt, approximately 4.5 miles west of the City of Petaluma and about 3 miles southeast of Two Rock. Access to the site is from Purvine Road via either Spring Hill Road or Middle Two Rock Road. Surrounding land uses are predominantly pastureland, dairy and poultry farms, horse and canine facilities, and rural residential development. There are 8 families that live on Purvine Road and one right next door and within with 2 young children. Nearby commercial operations include McClelland's Dairy, Reichardt Duck Farm, Spring Hill Cheese, Two Rock Dog Ranch, and the Great Peter Pumpkin Patch. Only one of these facilities use Purvine Road; McClelland dairy.

Water:

We have two shallow slow wells on our property and in a low water LEA 100 Z zoning and we are restricted to building further on our property. Over the last 10 years we have run out of water due to unforeseen circumstances and weather related issues more than once, and had to have water trucked in. The cattle that graze our fields and our lively hood are tied to this scarce source. You will have multiple accounts from neighbors in their input letters substantiating the water scarcity issue in this valley, and how this well in particular at 334 Purvine has drawn down others wells. People who have lived in this valley for decades can and will account to this.

They state the point drip emitter system for the greenhouse/indoor operation would use 0.33 gallons of water per plant per day, and would house approximately 4,500 plants, so daily water use would be about 1,485 gallons per day. This water use estimate is based on the applicant's 20 years of cultivation experience and directly from the applicant's current water consumption metered by the City of San Francisco at a 100 light, 3,500 square foot indoor cultivation facility using a similar drip emitter system. Where is this experience from? Illegal cannabis growing? Where is he growing now in San Francisco? Does he have a permit or license? San Francisco cannabis regulators state they have no record of Sam Magruder growing in San Francisco legally. These questions cannot be ignored and the county should demand answers.

Police and Safety

They state The Sonoma County Sheriff would continue to serve this area; existing sheriff protection facilities are anticipated to be adequate. The proposed project does not propose new housing. The maximum of 10 new job opportunities would not be anticipated to result in a substantial number of new residents moving to the area and requiring police protection. Therefore, 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. Marijuana related murders and home invasions couldn't be ignored in this county. In the last year, we have installed home security cameras running 24 hours a day. If this project is approved, Purvine, and the neighboring Spring Hill and Middle Two Rock Roads will attract a further criminal element to the neighborhood. The safety and security of our family is of upmost concern. Police and fire Response time is over 20 minutes and the Sheriffs Department has flat out told us to arm ourselves and that they will not be able to help in an emergent situation.

Road traffic

They state that the cannabis operation would employ up to 10 full-time positions, including two 24-hour security staff working opposite shifts, an on-site manager, and up to 7 total cultivation, processing, and harvest staff. A Trip Generation Analysis completed for the project (W-Trans, January 22, 2019) determined the project would be expected to generate an average of 31 trips per day, including 5 each during the morning and evening peak hours. The trip generation rate used in the analysis (3.05 for general light industrial land uses) accounts for all trips made to and from the site including trips associated with deliveries, visitors, and all operational activities that might occur based on a workforce of 10 employees. Due to the small number of employees and low number of peak hour trips, the County of Sonoma Guidelines requires no traffic study for Traffic Impact Studies screening criteria, and the Transportation and Public Works Traffic Engineer requested no study during the project referral. This project will exponentially increase the road traffic on Purvine. The County should demand a traffic study based on the number of new trips it will generate and the condition of the road.

They state access to the site is from Purvine Road, classed as a Local Road, which does not have designated Level of Service standards. There are no existing or planned mass transit

improvements cited along Purvine Road. The project is not located on a bikeway or closer than two miles to an existing or proposed bikeway. Project traffic is expected to have a less than significant impact on the traffic circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. This is simply untrue. Our roads are in dire need of attention, massive impassable potholes dot our street and the added traffic of 10+ daily employees coming and going on Purvine and neighboring roads because of this operation will be too much for it to handle.

Principal applicants history:

In 2016, the SEC fined and suspended the securities license of the applicant's CEO, Mike Harden, for insider trading, a serious crime, and required Harden's company to disgorge profits and pay penalties of \$8.9 million. In 2007, the ABC suspended the license of Magruder&Crum LLC (Principal applicant Sam Magruder) for serving alcohol to minors and also serving intoxicated persons and allowing minors into the bar.

A use permit for marijuana is unlike any other use permit this county has ever given out. You have a responsibility to look closer at this project than any other to date, and Purvine Road will not stand to be the counties experiment in granting this type of permit.

Unfortunately, we cannot begin to express all of our concerns in one letter. The applicant's actions and our evidence over the last year will prove the true intent and impact of this project. Our attorney, Kevin Block, will present you with more objections, evidence, and the courts recent decision. We will be speaking at the upcoming hearing and implore you to look further into the project, and this applicant and deny the use permit.

Sincerely,

Ayn and James Garvisch 625 Purvine Road, Petaluma Crystal Acker, Project Planner Permit Resources & Management Department 2550 Ventura Avenue Santa Rosa, CA 95403

March 29, 2019

Ms. Acker,

We am writing to you in regard to the matter UPC17-0020, a proposal for a permit for Cannabis cultivation at 334 Purvine Road in Petaluma. This serious matter is scheduled for a hearing on April 11th.

We have lived in Sonoma County since 1991, West County for more than 16 years. We purchased our forever home with no intention of ever moving. Surrounded by the beauty of rolling hills to the ocean and temperate climate and wonderful community oriented neighbors, we were home. Crime or invasion was never a consideration. Everyone was respectful, helpful and reliable.

Each of our neighbors have passed or relocated, with their homes and property purchased by absent owners who surfaced randomly throughout the year; never to help in an emergency or to maintain the shared easement. We witnessed a variety of unusual situations which were both fear inducing and completely inappropriate.

In the past 2 plus years we have witnessed the complete loss of property value, devastation and destruction of our bucolic setting. All as a result of Cannabis cultivation and its related and unrestrained grading, loss of privacy, traffic, noise, odors, crime, intimidation, being cornered by attack dogs on our property and being hostages at home, held in or out by a gate across the easement and commercial vehicles on our once private lane.

In mentioning the attack dogs that slip onto the easement, we have had to climb on top of our vehicles, on OUR property to escape these fearless creatures in their unwavering pursuit. Our lives and futures altered forever, no one wants to visit or pass through. Photos are available.

We have been negatively impacted in our careers and day to day easing in and out of our driveway. Routinely jeered and followed by passersby, the experience is quite frightening. We are considered to be part of the commercial enterprises which have taken over our lives.

We can truly empathize with one of your board members Susan Gorin, who lost her home. We understand the pain and heartache, though to lose to natural causes is more acceptable than to lose due to poor planning and lack of caring. We are the victims of these induced and inconsiderate conditions. One would think there would be more reflection and consideration for neighbors and neighborhoods. We have yet to meet anyone in Sonoma County who feels heard and or helped.

We have attended board meetings, had private board meetings, and visited county personnel. The sheriff does not help or protect us and the Board of Supervisors do not listen to us.

I am living the nightmare that those on Purvine are attempting to mitigate or avoid. We live in a historically water-scarce region. Cannabis is a high water demand crop. We live in a fire hazard area, growers have been permitted to process on site. This combination is lethal, and an invitation to a fire disaster. We have one way out with no turnouts or safe places. To make matters more dangerous, the area is known for poor phone reception.

I could continue with traffic accidents and high rates of speed and intimidation as I enter and exit my driveway, but enough said. I am reflecting on a time when the environment meant something in Sonoma County.

Sincerely.

Sandy and Mike Kolosey

The Lang Bagai Family 105 Purvine Road Petaluma, CA 94952

March 29, 2019

Crystal Acker
Permit Sonoma
2550 Ventura Ave.
Santa Rosa, CA. 95403

Dear County Planning Commissioners,

Many objection letters have been written to you from the immediate Purvine Road neighbors and the surrounding community voicing our widespread and vehement opposition to the proposed commercial cannabis operation at 334 Purvine Road. These letters compellingly explain the many reasons why our Purvine Road neighborhood is the wrong location for such a facility. The county's plan to approve these big fence commercial cannabis cultivation and processing compounds near residences, some with young children, is shocking and wildly inappropriate. This permit application UPC 17-0020 you are considering on April 11th is without precedent and has drawn us into dangerously uncharted land use territory. The negative impacts to our health, safety and wellbeing will simply be too high and cannot be mitigated. How can it be acceptable that this Purvine Road cannabis operation will drive the neighboring family and possibly 2 others from their homes if approved?

The neighborhood has spent thousands of hours and even more money trying to participate in the political process and convince the county that neighborhood compatibility must be a top priority as they plan to weave these big pot operations throughout our neighborhoods, some like ours with no history of cannabis growing. Our efforts and real-life feedback have been completely ignored by county officials and employees who seem hell bent on promoting the cannabis industry at any cost to its residents.

It is inconceivable and crushing to hear top county officials tell our tight knit Purvine neighborhood that we are just unintended consequences of their flawed cannabis ordinance. A road such as ours could obtain an exclusion zone against short term vacation rentals and yet the BOS slapped us in the face with a resounding "NO" when we lobbied for exclusion zones from the negative impacts of commercial cannabis facilities!

It's shocking to hear the head of Permit Sonoma tell us that such a commercial pot operation will be like having a minimum-security prison in the middle of our neighborhood. And that someone will have to suffer, and they can't please everyone.

The Ag Commissioner recently stated in the press that the county shouldn't kowtow to residents who've moved into agricultural areas from the city and don't want commercial cannabis next to them. We agree the county shouldn't kowtow to the big \$\$\$ investor applicants from San Francisco who purchased the 334 Purvine property in our ag neighborhood with the sole intention of raking in massive commercial pot profits at the expense of **sixth generation Sonoma County families like the Jensen's**, who live only hundreds of feet from the proposed project. The county sheriff point blank told this family to keep guns in their home for protection and to be prepared to deal with the inevitable crime that will come from having this next door.

How does this make any sense?

We implore you to read through **all** the information submitted from our Purvine Road neighborhood; it paints a clear picture of our situation since the applicants purchased the property in 2017. All the letters and photos will show you how the entire surrounding community does not want this here. Judge Broderick of the Sonoma County Superior Court has recently issued an injunction against the unlicensed and illegal cannabis growing, tours and promotional events that were taking place at the property with great frequency in 2018. The extensive photos and evidence that support our lawsuit speak volumes about the character of the applicants, their expansive plans for the property and their unfitness to obtain a permit.

As you consider this application, we expect you to set the bar very high and protect your rural neighborhoods and families.

Respectfully,

Phoebe Lang & Sanjay Bagai

From: Nancy and Brantly Richardson <nrchrdsn@sonic.net>

Sent: April 01, 2019 12:43 PM

To: Crystal Acker

Subject: Purvine Road application UPC17-0020 Comments

Ms. Acker,

There are a variety of reasons not to approve the application for the Purvine Road cannabis operation. However, the glaring, number one reason for rejection is the demonstrated disregard for following minimum County requirements by the applicants. The principals behind this application, among other things, began operating without either a county or state permit or license, launched a cannabis tourism business in direct contravention to County ordinances, and served liquor without a license. The list goes on but this short enumeration shows that these applicants are not the type of operators we want running any business in Sonoma County, let alone a cannabis operation. People with this kind of attitude about following the rules can most certainly be counted on to continue to act as scofflaws in the future should they foolishly be granted a license. In addition, approval will send the message to others that, in Sonoma County, there is no reason to bother to follow the established ordinances and rules. Approving this application would set terrible precedent.

Brantly Richardson Please send electronic receipt

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Charlene Stone <charlenestone99@yahoo.com>

Sent: April 01, 2019 9:07 AM

To: Crystal Acker

Subject: Purvine Road Cannabis

I am familiar with this case: it represents everything that is wrong with any application for cannabis grow in our county. I hope our elected officials and those whom we pay to be our watchdogs will take heed in this case. Charlene Stone, resident of west county.

Purvine Road is the wrong place for a commercial cannabis operation.

Purvine Road is a bucolic stretch of the Petaluma Dairy Belt. The road is narrow, winding and in poor condition. The evenings are dark and quiet. The neighbors all know and look out for each other and treasure their rural lifestyle. This is the wrong place to put a commercial marijuana business that will operate 24/7, will be surrounded by eight-foot fences topped with barbed wire, and will include security lights, ten large storage tanks, commercial HVAC systems, and will increase truck and employee traffic. Purvine Road is an agricultural area. Under County rules, cannabis cultivation is not agriculture and belongs somewhere else.

- The applicant blatantly violated state and local law by launching its Purvine Road operation without a County cannabis permit or a state cannabis license.
- The applicant used its unlicensed grow to launch a cannabis tourism operation in violation of the County Code.
- The applicant's own advertisements and Internet and social media postings show that it was giving tours of its operation and selling product without a permit or license.
- The applicant stopped violating the rules only when the neighbors sued and obtained a court order prohibiting the illegal conduct.
- The applicant has renovated the property for the purpose of hosting visitors and events, including space for group dinners and a bar.
- The applicant advertised the property as available for parties and events for up to 250 attendees at a minimum price of \$8,000 per day.
- The applicant's attempt to transform a peaceful stretch of the Petaluma Dairy Belt into a cannabis tourism destination, event center and retreat shows disrespect for the neighborhood and a belief that the applicant is above the rules.

■ The applicant has shown it is willing to game the County code enforcement system, which is under-resourced and cannot be counted on to ensure compliance.
■ The applicant provided a number of misleading statements in its application, including grossly underestimated water use figures and false claims that its principals were Sonoma County residents.
■ In 2016, the SEC fined and suspended the securities license of the applicant's CEO, Mike Harden, for insider trading, a serious crime, and required Harden's company to disgorge profits and pay penalties of \$8.9 million.
■ In 2007, the ABC fined and suspended the alcoholic beverage license of Magruder & Crum LLC, a company in which the applicant's COO, Sam Magruder, was a principal. It appears that Magruder hid his ownership interest in the company from the ABC, a serious offense.
• Given the established link between cannabis operations and increased crime, the neighbors are entitled to review the applicant's security report to determine whether the operation represents a significant threat to the safety of them and their families.
No one has a right to a cannabis permit in Sonoma County. A cannabis permit is a privilege which the County should grant only to the most qualified and law-abiding applicants.
■ The best indicator of future behavior is past behavior. Based on the past behavior of its principals, this applicant cannot be trusted to obey the rules and should not be granted a cannabis permit.
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From: Stefan Bokaie <stefan@bokaie.com>

Sent: March 31, 2019 11:09 PM

To: Crystal Acker

Subject: Opposition - 334 Purvine Road Cannabis Permit

Date: March 31, 2019

To: Crystal Acker

Subject: Opposition - 334 Purvine Road Cannabis Permit

My family and I have been residents of Sonoma county for the past 24 years. I'm an executive at Dell working in South Bay. I have had opportunities to move to South bay to be closer to my office, but we decided to stay and raise our family in Sonoma county. Primarily our decision was because the County gave us sense of belonging, plus its natural beauty with valleys and vineyards.

Our neighbors (Herrerias way, Petaluma) and us had to go through a very costly legal battle to shut down an illegal pot farm 500 feet from my bedroom window, and 1000 feet from the neighboring school. The ordeal was an emotional drain, and health issue for my neighbors and my family. We were let down by the county in not only allowing the grow, but stringing us along without recourse while recommending the illegal grow for State permit until our lawsuit was filed.

Now the Purvine road families have gone through a similar ordeal having to spend large sums to obtain a temporary injunction from the court to at least temporarily shut down the illegal grow at 336 Purvine. They are now faced with a hearing for the county to consider awarding the same grower a permanent permit and recommend for state permitting.

I understand the county supervisors have deemed taxation of Cannabis as one of the pillars of the Sonoma county income-source and aligned themselves with the Cannabis lobby. My wife and I have tried to keep ourselves informed and understand not only the laws, but also and effects of living in the proximity to Cannabis farms. The fact that Cannabis produces terpene which is measurable. The fact that terpene is a form of hydrocarbon toxic to humans at higher exposure. The fact that exposure to terpene has varying effect on individuals especially children, adults with raspatory illness, and others who are more sensitive to environmental conditions.

This was the case for our neighbors and my family, and now the neighbors in Purvine road face the reality that the county will turn a blind eye to any of these health concerns and plow ahead with granting permits. Based on our legal fees, I estimate hundreds of thousands of dollars already spent by residents of Sonoma county to fight illegal Cannabis grow.

In my opinion Cannabis has become the new snake oil. It cures all ailments and has minimal side-effects. The growers and those backing such grows are blindsided with greed. There seems to be a mad rush to cash in before the next guy, the next county, or the next neighbors beating you to the punch. This is a sad state of affairs. When the County is willing to collect taxes from a farm illegally growing controlled substance, (this was the case in Sonoma county's settlement with 3962 Adobe grow) without regard to illegality of such action.

I believe that the current trajectory of Sonoma county Cannabis policies has set the family oriented nature of this county on a downward spiral. "Cannabis tourism" is the new phrase tossed around as the new business plan that will make the county destination for the rich, bringing dollars to the county. Close your eyes and picture those coming to the county for smoking and toking up. What do you see? Picture yourself living 600 feet away from such a place, raising young children? How would you feel? Picture yourself having to put towels under the door and window sills 6 months in a year to stop terpene penetrating inside your house. Picture intoxicated patrons 600 feet away from your house and property on regular basis.

Even though I do not live on Purvine road, I do close my eyes and picture these possibilities. I strongly recommend for you to pause and re-evaluate the Sonoma county policies. There is enough land owned by the county to allow for Cannabis grow with proper zoning and setbacks. I know this will take courage. Do not risk the health of our children, and livelihoods of our neighbors just because of lobbies selling a bad business plans with misleading phrases, and arithmetic that is flawed at its core. Please consider my note apposing grant of Cannabis grow permit to 334 Purvine Road.

Sincerely,

Stefan Bokaie

Vice President, Software Engineering

Dell EMC | ISG, Networking and Solutions

767 Herrerias Way, Petaluma CA 94954 (707) 217-3862

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Carol Kennedy < cbkennedy 1 @icloud.com>

Sent: March 31, 2019 11:43 AM

To: nopotonpurvine@gmail.com; Crystal Acker

Subject: NO POT ON PURVINE

I have a personal interest in seeing that the industrial-scale marijuana operation does not go in at 334 PURVINE Rd. My two Grandsons live within 200 ft. of this property.

Traffic and noise: There will be a huge increase in traffic, notably heavy vehicle traffic. Many people enjoy walking and biking on PURVINE Rd.

The stench: There will be an intense skunk-like odor emitting from the marijuana operation that will prevent neighbors from gardening and other outdoor activities that they so enjoy now.

Physical safety: A marijuana operation at 334 PURVINE Rd. would cause all types of security concerns that would require fencing, security cameras and armed guards, not appropriate in a residential neighborhood.

This marijuana operation does not belong on Purvine Rd.

Sent from my iPad

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: BILL KRAWETZ <billkrawetz@comcast.net>

Sent: March 31, 2019 8:14 AM

To: Crystal Acker

Subject: 334 Purvine Road application - comments and concerns

Regarding Address: 334 Purvine Road (UPC17-0020)

Dear Crystal Acker,

I am writing to you in regards to the Cannabis application for 334 Purvine Rd. This application for a Cannabis cultivation operation is completely inconsistent with the character of the neighborhood and poses an unacceptable risk to the families in this area. The following concerns are raised:

- Safety will be irreversibly compromised. Under the ordnance, 9 plants per 100sq ft. are allowed. Each plant can yield 4 to 5 pounds of Cannabis, with a wholesale price between \$500and \$1000 per pound. Further an indoor operation can do 3 to 5 production cycles per year. The potential cash flow is in the \$5m, \$10m, 30 million dollars per year! I question whether it is possible to conduct an all cash business from a rural residential location without endangering themselves and their neighbors? Whether it's the cash on hand or the cannabis product itself, this level of business will at some point attract an unwanted confrontation, in which violence will occur. It's not IF but WHEN. The women, children and families of the neighborhood should not be subject to this risk.
 - 1. Inadequate Sheriff Coverage The west county is a very large area patrolled by one or two officers. During a neighborhood watch meeting a few years back, we had the local Sheriff come by to speak. He explained his territory is huge and on a good night he could maybe drive down our street once a night! Once a night! It's not possible for the Sheriff department to show enough presence to deter criminal activity. It's not possible for the Sheriff department to respond timely to a violent crime in process at Purvine Rd... We do not have enough rural law enforcement presence to adequately support this high-risk business in a rural setting.
- Scale of Operations The size and scale of the operation is inconsistent with the neighborhood. How can an operation this size be allowed in an area with 8 small family residences? This facility will be less than 600 feet from one Neighbors' home where they are raising 2 young boys.
- Violation of Law 334 Purvine began operations without a County cannabis permit or a state cannabis license. They violated the law period. This show lack of respect for your office, the County of Sonoma, the neighbors and the Cannabis industry. Don't reward their bad behavior by issue a permit!
- Tourism -The operators at 334 Purvive have started to promote cannabis tourism operation at their site in violation of the County Code. Their own advertisements, Internet postings show them promoting and giving tours of its operation without a permit or license. Again to you want to reward an operator who cares nothing of the law?
- Property values negatively impacted Any Cannabis operation can only have a negative impact on our property values. Honestly would anyone choose to purchase a home in an area with a large cannabis business? As discussed throughout 2-3 year Sonoma County cannabis ordinance process, there are negative impacts on safety, water use, Odors, increase activity, etc. This will decrease property resale value.
 - 1. Property Tax should be reduced to reflect reduce property values. This has already occurred in Washington State. The Spokane County Assessor reduced a property owner's assessment 10% due to the smell from a neighboring pot farm. Is the County willing to reduce its revenue by reducing the property taxes on these properties? Using the Spokane example as a point of reference, a 10% reduction is sales value would be a \$60,000 to \$100,000 cost to each

neighboring house! Is the applicant or the County of Sonoma going to compensate the neighbors for their loss?

In conclusion, a Cannabis operation of this scale is inappropriate for this are. Such a business would change the character of the neighborhood negatively. An operation of this size is more appropriate in a commercial business area where support services are available (Police, fire, water, parking).

Thanks Bill Krawetz

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do not click any web links, attachments, and never give out your user ID or password.

From: Anna Ransome <ransome@sonic.net>

Sent: March 31, 2019 10:01 PM

To: Crystal Acker

Subject: 334 Purvine Road/UPC17-0020

Hello Crystal,

Thanks again for all your help in getting the Biotic Habitat zoning overlay/General Plan Amendment for the Atascadero Wetlands.

I'm writing about the application for commercial cannabis at the subject address. This is a particularly problematical application because of the history of violations, lack of permits and illegal expansion of the commercial enterprise. There is already a noisy outcry about cannabis and neighborhood compatibility. Egregious violators, like these applicants, only serve to agitate residents and to set precedent for other bad actors if approved. It's shouldn't take a court order for cannabis operators to pay attention to the local and state laws that are meant to protect residents and the environment from exploitation.

Issues include, but are not limited to: odors and potential health effects of VOCs, water availability, increased traffic, noise, substandard road access, inadequate setbacks to residences, incompatibility with neighboring residential uses. As you know, odors are the most common complaint and have received media coverage in local and national newspapers. The Cannabis Ordinance has not adequately addressed the issues of odors and VOCs and our review of many cannabis applications has shown little science associated with odor remediation, especially from outdoor grows. Using vegetation to "absorb" odors is absurd and effects of odors and VOCs vary widely among individuals. Setbacks are inadequate as well.

We live several thousand feet from a winery wastewater treatment facility that has been upgraded, but not until the community complained for years of noxious odors and sickening smells that forced us indoors. We had to close windows in the summer to avoid the stench. Fortunately the facility changed hands, the owners listened, the Regional Board agreed that the treatment was inadequate, the system was rebuilt and the problem was remediated. That wastewater facility is approximately 850 feet from the four contiguous residences at this end of the street. There are closely planted trees, high grasses and all manner of shrubs between us and the facility, and it made absolutely no difference in the level of misery that we experienced.

Please recommend denial of this cannabis application. We would appreciate acknowledgment of receipt. Thanks.

Anna Ransome for Friends of Graton (FOG)

March 29, 2019

Crystal Acker

Project Planner III Permit Resource & Management Department 2550 Ventura Avenue, Santa Rosa 95403

Ms Acker,

I am writing to provide information during the public input period for UPC17-0020 (the proposed use permit for the commercial marijuana operation at 334 Purvine Road in Petaluma)

My name is Alex Balli and I have lived on Purvine Road for over 70 years. I am opposed to this operation going in.

I grew up on Purvine Road. I operate of my cattle ranch here on my land and also lease pasture land from nearby land-owners. In 2018, Sam Magruder and I agreed that I would continue to lease the pastures at 334 Purvine for grazing. Leasing land like this is getting harder to find these days.

I am very concerned about the character of the neighborhood changing. I am old-school and my values do not align with commercial marijuana growing among our homes and land here on Purvine Road. Our street, and this community, is the wrong place for this sort of operation. I know the families with small children next door that will be affected by this. They should not have to grow up with this in their back yards.

It has changed our street already. Traffic has increased, and the road cannot stand more traffic. Purvine has several large potholes all up and down and the daily traffic of the residents is enough.

I am concerned about my safety out here now. I have been reading about all the crime and home invasions related to marijuana in Sonoma County and I feel this will attract the wrong sort of people. I know my neighbors have put in security cameras already.

Please take this letter into consideration for the hearing.

Alex Balli 564 Purvine Rd, Petaluma March 28, 2019

Crystal Acker

Project Planner
Permit Resource & Management Department
2550 Ventura Avenue, Santa Rosa

Dear Crystal,

We are writing to you in response to the upcoming hearing for UPC17-0020 a proposed permit for commercial cannabis cultivation at 334 Purvine Road in Petaluma.

As a neighbor to this property, we are greatly concerned about this application and the potential impacts of a large-scale operation on our neighborhood, countryside and greater community.

We have many concerns about this operations impact on our area's water quality and availability. We also believe that the proposed plan will change the very nature and be detrimental to our community through increased theft, odor and traffic. Furthermore, we have reviewed the plans for fencing, screening and other physical requirements specific to this cannabis operation and believe that it will be damaging to the view sheds and aesthetics which are closely associated with the nature and feeling of our neighborhood.

Sincerely,

Drew Buechley and Nathalie Guion Buechley

3641 Middle Two Rock Road

Petaluma, CA 94952

CC Supervisor David Rabbitt

From: Cary Fargo <cfargo@sonic.net>
Sent: March 29, 2019 7:34 AM

To: Crystal Acker

Subject: Purvine Road. UPC17-0020_Legal_Notice_UP_BZA_4-11-19.pdf

Ms. Acker,

My reasons for opposing this project are numerous but here are just a few: Industrial scale impacts on a rural residential neighborhood. A public road that was barely adequate for its intended purposes *before* the applicants came along. Applicants ignoring proper permitting processes. Impacts on wildlife. This is an inaapropriate location for a commercial venture of this scale. This is not agriculture, it is big money taking advantage of Sonoma Counties poorly created cabbabis regulations. I voted for decriminalization personally, but I didn't vote for a free-for-all.

Thank you for your consideration if these concerns and please shut down this operation. I am getting complaints from clients all over the County in regards to similar poorly conceived projects.

Cary Fargo

707-484-6158 Vanguard Properties 6790 McKinley St. Sebastopol CA 95472 BRE#00773675 cfargo@sonic.net

www.vanguardproperties.com



THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Lois Givens <loisgiv@gmail.com>

Sent: March 29, 2019 4:27 PM

To: Crystal Acker Subject: Canabis on Purvine

Purvine is not a place for canabis to be grown. This is a dairy and beef cattle ,area not marajuna. We can smell cow manure but don't need to get the marajuna stink. Bad enough when an occasional skunk goes by but that's not all the time. Wonder if smelling it all the time has any effect on someone. It may effect children in the area. Has there been any research done?

If there is no problem with it why is there a need for survaleance cameras and guards. There are not enough deputies to patrol the areas. The crime rate and home invasions have already risen. I had a burglary last year. Property has been in family since 1955 and that was the first. Maybe just a coincidence. Who knows? There are already water problems in this area and canabis takes a lot of it to grow, Can damage the water shed so everyone will not have enough.

Having a permits is not going to stop illegal growing. That is going to continue.

Purvine road is terrible, narrow and full of pot holes. The roads getting to it are also bad.

Please no canabis

Lois Givens

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Jesse Jones <jesse.christian.jones@gmail.com>

Sent: March 29, 2019 9:36 AM

To: Crystal Acker

Subject: 334 Purvine Road Opposition

Dear Crystal,

My wife and I oppose this project with the most possible resolve. You have received many letters and emails that outline why this project is ill placed and ill conceived. I will also add the following:

- Cannabis is not agriculture any more than opium, cocaine or alcohol are. All have medicinal, clinical and recreational uses and I do not think you would recommend a facility that grows and processes poppies into morphine 800 feet from a young family. The fact that the voters of California made marijuana legal does not mean that it should be sited in residential areas. Such products are typically produced in industrial areas with strict security and oversight by state and federal authorities. Cannabis should be no different. Which leads to the second point.
- Planners and the county constantly state that sites comply with the county's ordinance when recommending them to BZA; this logic is flawed on two levels. 1. The county passed a bad ordinance that did not think through the implications of neighborhood compatibility. 2. Seemingly, to address this the county included a nuisance provision that puts the citizen's enjoyment of their property ahead of cannabis projects. How can you possibly say that this project will not impact people's enjoyment of their homes and create a nuisance when a judge issued an injunction to stop operations at this site because it was operating illegal and creating a nuisance?

In short passing a bad law and then using that law to justify the county's actions is draconian and planners, commissioners and supervisors have the discretion to look at the qualitative issues and not just pass projects through with bare minimum compliance standards and exceptions. We the people depend on you and the county to defend our interests as citizens and families along with the interests of big monied investors who do not live here

Below and for the record, are a list of other reasons that outline why we appose this project:

Below is a list of just some of the reasons to oppose this operation.

Purvine Road is the wrong place for a commercial cannabis operation. This facility will be less than 600 feet from our Neighbors' home where they are raising 2 young boys.

Purvine Road is 1 mile long, with 8 family homes along it. You can see the subject property clear as day from all directions, and all neighbors on the road will all be negatively impacted, by the smell, traffic, noise, view, water, and attention this operation will draw.

Purvine Road is severely pot holed, narrow, winding, and in very poor overall condition. This marijuana business that will operate 24/7, will be surrounded by eight-foot fences topped with barbed wire, and will include security lights, ten large water storage tanks, commercial HVAC systems, and will greatly increase truck and employee traffic.

The applicant blatantly violated state and local law by launching its Purvine Road operation without a County cannabis permit or a state cannabis license.

The applicant used its unlicensed grow to launch a cannabis tourism operation in violation of the County Code. Their own advertisements, Internet and social media postings show that it was giving tours of its operation without a permit or license.

The applicant stopped violating the rules only when the neighbors sued and obtained a court order prohibiting the illegal conduct.

The applicant has renovated the property for the purpose of hosting visitors and events, including space for group dinners and a bar. The applicant advertised the property as available for parties and events for up to 250 attendees at a minimum price of \$8,000 per day.

The applicant's attempt to transform a peaceful stretch of the Petaluma Dairy Belt into a cannabis tourism destination, event center and retreat shows disrespect for the neighborhood and a belief that the applicant is above the rules.

The applicant provided a number of misleading statements in its application, including grossly underestimated water use figures and claims that its principals were Sonoma County residents, when in fact they are not.

Principal applicants history: In 2016, the SEC fined and suspended the securities license of the applicant's CEO, Mike Harden, for insider trading, a serious crime, and required Harden's company to disgorge profits and pay penalties of \$8.9 million. In 2007, the ABC suspended the license of Magruder&Crum LLC (Principal applicant Sam Magruder) for serving alcohol to minors and also serving intoxicated persons and allowing minors into the bar.

Jesse C. Jones and Michaela McCormick

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www.winewaterwatch.org

March 25, 2019

To: Crystal.Acker@sonoma-county.org

Subject: Objections to Proposed Cannabis Permit at 334 Purvine Road (UPC17-0020)

Dear Ms. Acker;

Wine and Water Watch is a local organization of over 500 residents concerned with the over-development of the wine tourism industry. We promote ethical land and water use and social equity. We oppose the industrialization of agricultural lands not growing food, fiber or silage and advocate agricultural practices that are ecologically regenerative.

We are writing today in support of the neighbors at 334 Purvine Road for multiple reasons. There is something very wrong with allowing drug-tourism activities in a community of families and their children. Unpermitted events and tour buses, along with other safety concerns in a neighborhood, needs to be addressed. In addition, the residents state the odor from the grow and subsequent processing is sickening their families. We believe you should listen to them.

Before the County can approve any conditional use permit it must be determined the proposed use permit does not create more problems for health, safety, peace and welfare of the public. Sonoma County Code Section 26-88-250(f) provides relief for neighbors and needs to be applied here.

The standard is quite specific that any such operation should "not create a public nuisance or adversely affect the health or safety of nearby residents or businesses by creating dust, light, glare, heat, noise, noxious gasses, odor, smoke, traffic,

vibration, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, runoff or wastes."

This project has already been enjoined by a judge for multiple violations. CEQA review requires full disclosure of potential environmental impacts including cumulative impacts, which are rarely addressed by this county.

If the County is not equipped to properly set regulations to protect neighbors and the environment, then maybe a moratorium is in order until the regulations actually work for everyone.

Wine & Water Watch Board Members:

Janus Matthes Charlotte Williams Merrilyn Joyce Deborah Preston Shepherd Bliss Pamela Singer

Cc: nopotonpurvine@gmail.com

From: Carol V <carolvsr@sonic.net>
Sent: March 29, 2019 3:22 PM

To: Crystal Acker

Cc: nopotonpurvine@gmail.com

Subject: opposition to the 334 Purvine Road project

Importance: High

Dear Ms. Acker,

I am a tax paying senior citizen and lifelong resident of Sonoma County I am familiar with the multitude of problems Sonoma county residents are facing with pot grows next to them. My remote country property had more than 25 years of illegal grows causing pollution, degradation to the environment and to the former pristine watershed.

Currently my property has two permits causing concerns UPC17-0067 5364 Palmer Creek Road and UPC17-0081 20077 Sweetwater Springs Road. I oppose the 334 Purvine Road project.

I share this with you as I have experience with most of the problems affecting Purvine Road and most other neighbors who live by proposed permit grows. I will not go into detail as you have received many emails outlining the multitude of problems including:

- Odor from outdoor grows that can travel more than a mile on warm summer and fall days, especially when there is a breeze.
- No amount of vegetation will mask the odor.
- Increased water use
- Increased traffic
- Noise, air, and light pollution
- Wrong place for a commercial cannabis operation
- Cannabis tourism
- Event center

In conclusion, the county needs to respect the neighbors who are asking you to oppose this project. Hundreds of voters are following your decision, a decision that will negatively affect the quality of life for many if you allow this project.

Thank you for your time.

I would appreciate an acknowledgment that you received this email.

Carol Vellutini 610 Willrush St. Santa Rosa, Ca 95401 707-546-6308

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From: Suzanne Lindsey <suzlindsey@earthlink.net>

Sent: March 28, 2019 4:38 PM

To: Crystal Acker Subject: 334 Purvine

To Permit Sonoma:

I am emailing my protest regarding issuing a permit for a cannabis Farm on Purvine Road.

The applicants represent some of the wealthiest families in the Bay Area. As such, the feeling of entitlement is overwhelming towards anyone making a move to stop them. Our daughter lives on Purvine Road. We own a ranch in the county.

Mr Magruder told our daughter, 'we WILL get our way, you cannot win.' The subtext was,.....we have political influence (and they do) so back off.

Our governor through his business, Plump Jack is a supporter. A principal in the business is a member of the Alioto family of San Francisco.

But, regular working folks banded together and fought.

Now, the 334 people are again trying to obtain a permit even though they violated many laws previous to a lawsuit filed by the protestors.

Again, entitlement raises its ugly head, that and influence and money.

Please deny these greedy 'farmers' the permit they want.

Bucolic Purvine Road is not the place for this endeavor.

Again, Deny the granting of this permit, Suzanne and Don Lindsey 22400 Timber Cove Road.

Sent from Earth

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Nancy Richardson <nrchrdsn@gmail.com>

Sent: March 28, 2019 7:28 AM

To: Crystal Acker

Subject: UPC17-0020 CANNABIS APPLICATION

To: The Board of Zoning Adjustments,

I am writing to oppose the permit application for UPC17-0020 on 334 Purvine Road in Petaluma. It is incomprehensible that Permit Sonoma would move this controversial application into the very crowded hearing schedule when the applicants are under court injunction and have been accused of selling alcohol without a license at this parcel and entertaining tourists (canna-tourism) which is an unpermitted activity in County law and strictly forbidden. This case has not yet gone to trial but the applicants may be found guilty of the accusations against them and the County would be in a most embarrassing situation to say the least if the BZA gives them a permit to grow at the hearing on April 11th.

It is widely believed by the public that the BZA simply rubber stamps every decision recommended by Permit Sonoma and imposes "conditions" or "mitigations" on the project if there is any public objection. It is also widely believed by the public that Permit Sonoma/Code Enforcement is either unable or unwilling to enforce the conditions attached to the permit; the applicants know this and gladly sign the agreement. Apparently the record is 84 "conditions" the BZA and Permit Sonoma applied to a winery application. If you decide to apply conditions to this permit on April 11th, these applicants cannot be trusted to obey any rules if their past behavior is any indication and they are found guilty in the future trial. Either deny this application on April 11th or move to postpone it until after the court case when you will know if the applicant violated state and local law.

Ask yourselves why did Permit Sonoma move this application to the front of the line?

Please provide an electronic receipt of this comment.

Nancy Richardson, Bennett Valley resident

From: Renee Ronshausen <petalumahorses@gmail.com>

Sent: March 28, 2019 2:32 PM nopotonpurvine@gmail.com

Cc: Crystal Acker

Subject: Letter

To whom it may concern,

My name is Renee Ronshausen, and I have lived in petaluma since 1987. My husband and I live on a ranch on Middle Two Rock Rd, we are concerned about the recent actives on Purvine Rd. The road is in disrepair and has been a problem for many years, but the traffic has increased.

The applicant on 334 purvine would like to host parties, visitors and events on the property with space for 250 dinners and a bar.

I feel that our area is the wrong place for this, we do not have the roads for this or police to watch for drunk drivers or people using cannabis. They would like at least 250 people at the parties. Where will they park? How will our narrow roads handle this traffic? This commercial operation will have many people working and bringing in an outside criminal element. The owners have shown their disregard for the law by not waiting for permits and starting the operation.

I would like to see this type of activity closer to town where traffic is more controlled. If people are needing rides taxi service doesn't come out here in the country. It puts a burden on our deputy sheriffs department. More accidents for our volunteer fire department to go to and highway patrol and sheriffs.

It's a mistake to think that our quiet country side will stay that way.

My husband and I value star lit skies and peace in the neighborhood. We would like you to consider how this commercial operation effects everyone who lives here.

Thank you, Renée and Ken Ronshausen

Sent from my iPhone

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Michele Ross <mickross@comcast.net>

Sent: March 28, 2019 4:26 PM

To: Crystal Acker Subject: JUST SAYING NO!

Ms. Acker,

I am a local citizen voicing my opposition to the proposed disaster that threatens local families health and safety on Purvine Road!

This proposed "grow and smoke it up facility" is NOT ACCEPTABLE. This is where people whom care about the health, safety and future of our young people draw the line on the absurdity of allowing legalized marijuana grows areas where people live. It needs to be stopped BEFORE it destroys a previously safe and peaceful place.

Purvine Road is the wrong place for a commercial cannabis operation. This facility will be less than 600 feet from our Neighbors' home where they are raising 2 young boys.

Purvine Road is 1 mile long, with 8 family homes along it. You can see the subject property clear as day from all directions, and all neighbors on the road will all be negatively impacted, by the smell, traffic, noise, view, water, and attention this operation will draw.

Purvine Road is severely pot holed, narrow, winding, and in very poor overall condition. This marijuana business that will operate 24/7, will be surrounded by eight-foot fences topped with barbed wire, and will include security lights, ten large water storage tanks, commercial HVAC systems, and will greatly increase truck and employee traffic.

The applicant blatantly violated state and local law by launching its Purvine Road operation without a County cannabis permit or a state cannabis license.

The applicant used its unlicensed grow to launch a cannabis tourism operation in violation of the County Code. Their own advertisements, Internet and social media postings show that it was giving tours of its operation without a permit or license.

The applicant stopped violating the rules only when the neighbors sued and obtained a court order prohibiting the illegal conduct.

The applicant has renovated the property for the purpose of hosting visitors and events, including space for group dinners and a bar. The applicant advertised the property as available for parties and events for up to 250 attendees at a minimum price of \$8,000 per day.

The applicant's attempt to transform a peaceful stretch of the Petaluma Dairy Belt into a cannabis tourism destination, event center and retreat shows disrespect for the neighborhood and a belief that the applicant is above the rules.

The applicant provided a number of misleading statements in its application, including grossly underestimated water use figures and claims that its principals were Sonoma County residents, when in fact they are not.

Principal applicants history: In 2016, the SEC fined and suspended the securities license of the applicant's CEO, Mike Harden, for insider trading, a serious crime, and required Harden's company to disgorge profits and pay penalties of \$8.9 million. In 2007, the ABC suspended the license of Magruder&Crum LLC (Principal applicant Sam Magruder) for serving alcohol to minors and also serving intoxicated persons and allowing minors into the bar.

Michele Ross

Bodega Bay, CA

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Richard Strozzi-Heckler <richard@strozziinstitute.com>

Sent: March 28, 2019 4:02 PM

To: Crystal Acker

Subject: No Pot on Purvine and discretion in all these choices

I stopped growing grapes on my property because of water Assuredly you are aware of the water condition in this area It's simply not feasible Please make the right choice

Richard Strozzi-Heckler PhD.

Here are other reasons:

Purvine Road is the wrong place for a commercial cannabis operation. This facility will be less than 600 feet from our Neighbors' home where they are raising 2 young boys.

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From: Laura Waldbaum <laura@waldbaumswildridge.com>

Sent: March 28, 2019 3:01 PM

To: Crystal Acker

Subject: UPC17-0020 334 Purvine Rd.

Ms. Acker,

I am writing this letter to express my concerns about cannabis odors produced during cultivation and processing if permit UPC17-0020 is approved. There is no scientific evidence available to indicate that a setback of 300 feet from a cannabis cultivation site to an occupied dwelling is adequate to protect the inhabitants of that home from harm due to odors and volatile chemicals produced by cannabis cultivation. In contrast much anecdotal evidence exists that these volatile chemicals do travel more than 300 feet. Past illegal growing activity at the site has caused breathing problems and other discomfort to residents of neighboring properties. If this project is approved planners must include conditions to protect neighbors. One such condition should be a three strikes and you are out plan such as is implemented in Santa Barbara County. If a cannabis operator receives three verified complaints of odor within one year immediate corrective action must be implemented to resolve the issue or the permittee loses their cultivation permit license.

Because Sonoma County has not done an environmental impact report to determine the impacts of the odors associated with cannabis cultivation, neighbors of these projects are being used as human guinea pigs. The permitting process should not have been initiated in Sonoma County until all of the impacts of commercial cannabis growing could be thoroughly analyzed. The effects on neighbors of volatile chemicals in cannabis odors is unknown. There must be a mechanism in place to protect these neighbors from harm should the 300 foot setback prove to be inadequate.

Thank you for your attention to this matter.

Laura Waldbaum

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Deborah Eppstein deppstein@gmail.com

Sent: March 27, 2019 2:16 PM

To: Crystal Acker

Subject: Re: Comments for file on 334 Purvine Road (UPC17-0020)

Thanks!

I have one additional comment to add to this file; The biotic study only did an onsite visit in May. An on site visit needs to be done at least 3 times, once in February, once in May, and once in August.

Thanks also for entering this into the file for 334 Purvine Road.

Best regards, Deborah Eppstein

On Mar 27, 2019, at 8:40 AM, Crystal Acker < <u>Crystal.Acker@sonoma-county.org</u>> wrote:

Comment Received. Thank you, Deborah.

Crystal Acker, M.S.

Planner III

www.PermitSonoma.org

County of Sonoma

Planning Division | Project Review

2550 Ventura Avenue, Santa Rosa, CA 95403

Direct: 707-565-8357

Office: 707-565-1900 | Fax: 707-565-1103

<image001.png><image002.png><image003.png><image006.png>

<image007.jpg>

OFFICE HOURS: Permit Sonoma's public lobby is open Monday through Friday from 8:00 AM to 4:00 PM, except Wednesdays, open from 10:30 AM to 4:00 PM.

From: Deborah Eppstein [mailto:deppstein@gmail.com]

Sent: March 26, 2019 7:53 PM

To: Crystal Acker < Crystal.Acker@sonoma-county.org

Cc: Phoebe Lang <phoebehlang@gmail.com>

Subject: Comments for file on 334 Purvine Road (UPC17-0020)

Dear Crystal,

I am a resident of rural Sonoma County and am extremely concerned about the incoming commercial cannabis cultivation into inappropriate rural areas that have huge negative impact on residents. I am familiar with the application at 334 Purvine Road and thus want to provide these comments in objection to this application.

I find this application totally unsuited for approval for many reasons.

- 1) The applicant is a bad actor. This was clearly demonstrated by his prior overt disregard of the both local and state law by illegally running a cannabis cultivation operation as well as cannatourism business. It required the neighbors to file a lawsuit to get him shut down. Note that cannatourism is furthermore forbidden by the Cannabis Ordinance. A player who so blatantly disregards the law is not someone Sonoma County should ever consider to allow to obtain a permit. I assume the county must have run a full background check on him and if so, what are the findings? The Cannabis Ordinance does not allow anyone who had a permit revoked to apply for a new permit for 2 years. This same standard needs to be applied to someone who illegally operated without a permit.
- 2) The location is completely in conflict with the surrounding residential area. The Cannabis Ordinance specifies <u>minimum setbacks</u>, whereas the applicant seems to view the listing of a minimum setback as fully adequate. The overriding section of the Cannabis Ordinance, 26-88-250(f), states:
- (f) Health and Safety. Commercial cannabis activity shall not create a public nuisance or adversely affect the health or safety of the nearby residents or businesses by creating dust, light, glare, heat, noise, noxious gasses, odor, smoke, traffic, vibration, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, runoff or wastes.

This section trumps any minimum setback listed. The fact that the applicant operated illegally actually has one significant benefit in evaluating this application now, as the <u>neighbors have confirmed that this operation violated the above Health and Safety section</u>. The public nuisance of traffic, noise, and noxious gasses and odor were directly experienced. This alone is cause to deny this application.

3) Odor is one of the very deleterious impacts on neighbors. Cannabis odor travels well over 300 ft. I have experienced overpowering odor 700 ft from a neighbor's outdoor grow of only 10,000 sf, uphill and separated by thick tree cover, preventing use of the yard and requiring windows to be closed at night. Neighbors 1200 ft away (likewise separated by thick trees) have also experienced the noxious odor. I have experienced odor from an outdoor grow over 2000 ft away. Trees do not mitigate the odor, nor does a fence, nor does the unknown idea mentioned of vapor-mist - which is unproven for outdoor grows (and in itself would create a whole separate set of issues on potential harmful effects from those untested compounds). I know of residents living hundreds of feet from cannabis cultivation operations who experience severe sickness from these compounds.

The fact that some dairy farmers spread manure during summer months is not a solution to the odor problem; that only compounds the situation. It is ludicrous to even mention this; two bad smells don't make a right.

4) Security and crime are major issues. Just from the physical side, a 7 ft tall chain link fence with green plastic slats, topped by one foot of barbed wire, is just plain ugly and definitely does not belong in residential neighborhoods. Rose bushes will not

hide this! However, of paramount issue is the risk of crime that comes with commercial cannabis operations. These have both a high value crop but also can have large amount of cash on site, as banks are not an option, and are known to attract crime. There are many examples of the crime - even murder- that has increased in Sonoma County in recent years directly associated with cannabis. To speak form personal experience, I have directly been the victim of collateral crime due to a cannabis operation at the end of where I live, a 2.5 mile long road with ~16 homes, where every one whose car was not locked was robbed in the middle of the night from people targeting the cannabis operation. Cannabis operations unfortunately attract criminals. It is totally wrong to allow this type of operation in residential neighborhoods, period.

5) Water use: The applicant lists a ridiculously low amount of water usage for his outdoor grow, citing 0.05 acre feet/year for 28,560 sf. The figures used by Sonoma County for an outdoor grow are 2 acre ft/year for one acre, which is 1.31 acre ft for a 28,560 sf grow. This is consistent with applicant's disregard for the facts and avoiding statements that might make his application look poor. Quite the contrary such uninformed statements make this application even worse.

In summary, this application should be denied.

Thank you for reading these comments and please enter them into the file for 334 Purvine Road (UPC17-0020).

Sincerely,

Deborah Eppstein, PhD Santa Rosa, CA 95409

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From: Jeffrey Levenstam@gmail.com>

Sent: March 27, 2019 1:53 PM

To: Crystal Acker

Cc: nopotonpurvine@gmail.com

Subject: Large Scale Cannibus Permit Application - 334 Purvine Road Petaluma, CA - UPC 17-0020

We are writing to you today with respect to the proposed use permit UPC17-0020, which covers a potential large scale cannabis cultivation activity and production facility that would be highly disruptive to the rural/Agzoned quiet family neighborhood in which the property is located.

The neighborhood has been unified in objecting to this proposed use of the 334 Purvine Road property since it first became known to us. This potential disruption and denigration of our neighborhood has a huge impact on the surrounding residents. For the county to permit this activity and allow it to proceed would be an absolute betrayal and abandonment of the residents of this area. This operation has already adversely impacted us, and we urge you to refuse to issue the use permit and to take action to close the cannabis operation underway on the property.

Purvine Road is a short and narrow road that is in deplorable shape due to numerous large potholes and other problems with the road. These problems has happened with relatively light traffic, all before the significant increase in traffic that will accompany this expanded use of the property as a production facility and tourist destination. The road is simply not designed or built to accommodate such traffic. Additionally, the increased traffic will cause a disruption to the quiet rural nature of the community.

This would create a significant change to the surrounding area and its residents

To demonstrate the overwhelming reach of this disruption, you should realize the reaction to this planned use of the property. There are 8 properties fronting on Purvine Road. From discussions with our neighbors, it appears that at least 2 of the 8 property owning families will move if this activity is permitted to occur at 334 Purvine Road. We also understand a few more families are considering selling and leaving the community. We honestly believe this will destroy the fabric of the area, and will fundamentally and negatively impact the life we have built in this community. We purchased our property in 2000 and have lived here all this time. We have built our lives in this rural setting with our horses and dogs and we strongly believe the County would undermine our life and those of our neighbors if it approves this permit.

Water Issues

While we are zoned for agriculture, we have decided not to grow crops or raise cattle on the property due to the very low water level in our well. This has been a concern since we moved onto the property and was something that almost caused us to look elsewhere when we bought the home. This area is notorious for having low water levels, so a high water use crop such as cannabis is completely contrary to any concept of what would constitute an appropriate land use for the County to permit in this area.

Traffic Issues

In addition to the traffic, having an operation with large cyclone fencing and other accounterments such as large floodlights, high fences, security stations at the front gates, etc. will be highly visible since the area is all open spaces and relatively flat. So, there will be a visual impairment as well as the traffic and noise disruption.

Safety/Criminal Activity Concerns

There is also a significant safety concern with this operation "moving into the area." Marijuana related crimes, including murder and burglaries, would be an extreme threat in such a remote rural location. Our area receives very little to no regular patrols from the County Sheriff's office. We understand that there will be no increased sheriif's office presence to protect against the risk of crime related to this operation. This puts us all at risk of home invasion, armed burglaries, and other crimes, including potentially violent crimes. Beyond the crime directed at the actual cannabis activity, this will bring a criminal element into our area which we are not equipped to protect ourselves from. And, we were told by county representatives that we should not expect any measurable increase in policing of the area to help us address this significantly increased threat potential.

Air Pollution Concerns

We are also told that operations such as this create significant odors. While we do not have children, we find it highly disturbing to think that we will have a constant marijuana smell on our property. We expect to have some odors in the air related to farm animals and, in fact, we have no problem with this. However, a constant smell of marijuana in the area would be offensive and incompatible with raising families in the surrounding community.

Conclusion

As a neighborhood/community, it is rare for our neighbors to ask anything specific from our County Government. We tend to be pretty independent and enjoy the freedom of living in a rural community. So, please take this request to deny the permit and protect our community seriously. Approval is an outright betrayal of the people in this community. This activity is a real and significant threat to the peaceful lifestyle we have worked hard to build and protect. We appreciate your taking our input very seriously and helping us to protect our community from what would have to be considered an invasion of this proposed cannabis production facility in the middle of our rural community. We are happy to provide further input or to answer any questions you may have. We look forward to your support in this matter. Respectfully submitted

Jeff & Jean Levenstam 650 Purvine Road

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Grace Barresi <gmbarresi@gmail.com>

Sent: March 26, 2019 2:06 PM

To: Crystal Acker Cc: Ayn Garvisch

Subject: Re: 334 Purvine Road

Thank you, Crystal.

I had an opportunity to review the DRAFT MND for 334 Purvine Road and was actually quite surprised, and frankly horrified, by the section on odor mitigation, specifically for both indoor and outdoor cultivation. My husband and I live adjacent to a large scale commercial cannabis business (38,000sq feet outdoor grow and 2900 sq feet indoor). The odor and air pollutants from this business have forced us indoors from the time the plants are placed in the ground to well after they are harvested (April through November). The smell makes us physically sick and overwhelms are home and our backyard. You can detect the cannabis odor from at least 1000 feet away. Our bedroom window is 125 feet from the indoor cultivation and about 500 feet from the outdoor cultivation. The smell is so bad that we are forced to wear respirators to go outside during these months. We are also dealing with the odor from the indoor cultivation all year round. Charcoal filters do not eliminate the odor. Unless a building is pressurized and sealed, odor will escape.

I'd encourage you to visit a cannabis farm to experience first-hand how far the smell travels. The current cannabis ordinance for distance from outdoor cultivation site to property line is completely inadequate (300 feet). There is no setback for indoor grows on certain zoned lands. Vegetation and trees **do not block the smell or odor particulates**. There are large pine trees on the western side of our home right next to the indoor and outdoor cultivation sites and they do nothing to mitigate the smell. The only way to mitigate the smell is not have these businesses so close to neighboring homes and increase the setbacks.

Additionally, you state the following:

"The project would generate cannabis odors from the outdoor cultivation operation during the last 4-8 weeks of the growing season prior to harvest (September-October)". This is not true. The odor is pungent from the time the plants are placed in the ground in April and the smell becomes completely overwhelming and unbearable from August through much of October and in to November if the plants are being dried on the property.

"The cannabis ordinance specifies mandatory setback distances for outdoor cultivation sites (300 feet from residences and businesses and 1,000 feet from schools, parks and other sensitive uses) to facilitate odor dissipation by distance. Generally, odors dissipate with distance from the source and opposite the primary direction of the odor flow. Surrounding an odor-generating land use with a natural buffer or windbreak has been a successful strategy to reduce odor impacts for poultry and swine operations". This is not true for flowering cannabis plants. There are multiple examples all over Colorado, Washington, and now California of residents suffering from the pungent odor of cannabis that seeps into homes and does not dissipate. You should not be using an example of poultry or swine.

"The buffer/windbreak strategy is most effective when parcels are large (at least 10 acres) and land uses are far apart, maximizing odor dissipation with distance between uses. Odor plumes generally travel along the ground in the direction of the prevailing winds. However, tree and shrub buffers have been found to deflect the odor plume above the vegetation layer where it is diffused into the atmosphere (USDA NRCS 2007). Additional benefits of natural buffer/windbreaks include visual screening, noise reduction, and providing food, shelter and overwintering habitat for birds and beneficial invertebrates, such as insect predators and native pollinators (USDA NRCS 2007 and 2014). Fencing and landscaping is proposed around the outdoor cultivation site, consisting of a 7-foot-tall chain link and green plastic slat fence, with a row of rose bushes planted in front

of the fence and taller trees and shrubs planted in clusters in front of the rose bushes. The **combined fencing** and landscaping is expected to deflect odor plumes upward to diffuse into the atmosphere and be further dispersed along the predominant wind direction. The prevailing wind direction during September-October is from the coast- west to east. Most of the parcels to the east are large agricultural parcels without residences; however, there are four parcels with residences within one half mile of the cultivation site in a general easterly direction. The approximate distance between the outdoor grow site and the nearest residence to the east or northeast is about 850 feet away. This is not far enough away to mitigate odor. You state in the above paragraph that the buffer strategy is most effective when land uses are far apart. 850 feet is not far enough away. One of our neighbors homes is 700 feet from the outdoor cultivation and their home is inundated with cannabis odor. Fencing and landscaping doesn't deflect the odor plume upwards. What research are you using to verify or substantiate this claim? What research has been done on cannabis odors?

"Due to a combination of multiple contributing factors: **limited time of year that outdoor cannabis plants would be producing odors"**; this is not an accurate statement. As I stated, the odor from the cannabis plants can be smelled from April through November, especially if plants are dried on site, which is what 334 Purvine Road is requesting. I encourage you to visit large scale commercial grows to experience this first-hand.

However, in the case that odors are not adequately diffused and verified odor complaints are received, Mitigation Measure AIR-3 would reduce the impact to a less than significant level. Significance Level: Less than Significant with Mitigation Incorporated. Is this an approved system to reduce or completely eliminate odor? Where is the evidence for this fog system? Who will police this? Is Permit Sonoma going to hire more staff to deal with all of these issues as they arise? When have mitigations such as these been effective to eliminate odor from an outdoor grow? Where is the research on this?

My husband and I, along with 7 neighboring homes, have been living with the sickening cannabis odor and air pollutants for almost 2 years due to a cannabis business being adjacent to our property. This is a public nuisance per the cannabis ordinance. The Sonoma County Cannabis Ordinance states in the Health and Safety Section 26-88-250(f): "Commercial cannabis activity shall not create a public nuisance or adversely affect the health or safety of the nearby residents or businesses by creating dust, light, glare, heat, noise, noxious gasses, odor, smoke, traffic, vibration, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, runoff or wastes".

The only solution is to deny this permit for outdoor cultivation. The neighboring homes are simply too close for this business. Children live in these homes.

Thank you for your time,

Grace Guthrie Sebastopol

On Tue, Mar 26, 2019 at 8:03 AM Crystal Acker < Crystal. Acker@sonoma-county.org > wrote:

Crystal Acker, M.S.

Planner III

From: krdecker@earthlink.net
Sent: March 26, 2019 6:46 PM

To: Crystal Acker

Cc: NPOP

Subject: UPC17-0020, 334 Purvine Road

Dear Crystal,

I'm writing to voice my concerns and objections to the proposed Cannabis Permit at 334 Purvine Road (UPC17-0020).

I recently drove out that way and found the road too narrow and winding to support the additional traffic a commercial cannabis operation brings. Purvine also has many potholes and rough road patches in desperate need of repair and maintenance. The additional traffic related to the proposed 10 full-time employees (in & out 40 trips per day), and related commercial delivery and shipment trucks, will overburden this poorly maintained road. I might add, that 10 FTEs is a ridiculously unrealistic number given the size of the proposed operation. As you know, we had a 1,000sf nursery operation near our property on Lakeville Highway. That operation, a mere fraction of the roughly 43,000sf proposed in permit application UPC17-0020, had more than 10 employees on a regular basis along with daily trucks on our small rural road.

Also of concern is the safety of the neighboring residents. This area is not only secluded but has minimal lighting on the road and public/private areas. The only public safety services available to these residents is the one patrol of Sheriff deputies that would be on duty most hours of the day and night. These factors put the neighboring residents at increased safety risk, especially given the large scope and volume of the activities proposed. If such an operation was to be approved, the safety plan for 334 Purvine should be required to provide safety to ALL residents that could be impacted by such a high-risk activity. Given the established link between cannabis operations right here is Sonoma County and increased crime here in Sonoma County, the neighbors should be included in the review of the security report and be entitled to provide feedback and input. The Sheriff's report to the Board of Supervisors clearly stated that the majority of murders and armed robberies occurring here over the past few years have been cannabis related and were not isolated to the people involved in the cannabis activity – many innocent neighbors have been subjected to traumatic, violent events and even death.

Neighborhood compatibility for this proposed operation is at complete odds with the existing culture. This is a quiet, peaceful family area, not appropriate for a 24/7 high activity business. The applicant for this proposed operation has shown a complete disregard for the existing homeowners and ranchers, and frankly, has shown a complete disregard for the county's cannabis ordinance: hosting retail events without a permit, advertising the property for parties as large as 250 people and promoting cannabis tourism – which is in violation of the County Code. I was particularly disturbed to see pictures in the newspaper of a toddler walking near the cannabis plants growing outdoors, clearly an age violation.

Finally, in reviewing the Proposed Mitigated Negative Declaration, I noted you excluded Transportation & Traffic, Aesthetics, Hazards and Hazardous Materials, and Hydrology and Water Quality from the list of Environmental Factors Potentially affected. As someone who has personally experienced living next door to a commercial cannabis operation, I can tell you from personal experience that each of these areas has a potential impact on the environment:

(1) As I described above, the traffic from these 24/7 operations causes congestion. Given Sonoma County's severe fire threat and the existing conditions on Purvine road, traffic safety issues should be reviewed and addressed to ensure Purvine road is wide enough and in proper condition to accommodate fire fighting vehicles travelling to the scene of a fire

and/or police SWAT vehicles travelling to the scene of a violent crime while simultaneously allowing families in fleeing vehicles to get to safety away from the area.

- (2) The Aesthetics of Cannabis Operations are commercial in nature: industrial fencing, security guards, vicious dogs, barbed wire, gates, cameras, etc. These factors exist and should be included in the environmental review of the proposed operation so interested parties can see how this operation impacts the aesthetics of the area and provide the opportunity for public feedback.
- (3) (3) The cannabis industry is a high user of many pesticides and rodenticides. Given the magnitude of the proposed operation, it is imperative that these chemicals be analyzed not only for their hazardous material composition but also their impact on the hydrology and water quality of the area. This is a residential and livestock area, and neighboring ranches that share underground water resources and prevailing winds should be assured that these chemicals will not effect their animals, the people who eat the animals or their products (eggs, milk, etc), or their long-term water supply.

I understand that there is a push to get the pending cannabis permits through the system as fast as possible, but please take the time to make sure only appropriate applications are approved, and, this inappropriate location with a proven ordinance violator is properly denied.

Sincerely,

Kristen Decker

PS – please reply and confirm that you have received this letter.

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Deborah Eppstein deppstein@gmail.com

Sent: March 26, 2019 7:53 PM

To: Crystal Acker Cc: Phoebe Lang

Subject: Comments for file on 334 Purvine Road (UPC17-0020)

Dear Crystal,

I am a resident of rural Sonoma County and am extremely concerned about the incoming commercial cannabis cultivation into inappropriate rural areas that have huge negative impact on residents. I am familiar with the application at 334 Purvine Road and thus want to provide these comments in objection to this application.

I find this application totally unsuited for approval for many reasons.

- 1) The applicant is a bad actor. This was clearly demonstrated by his prior overt disregard of the both local and state law by illegally running a cannabis cultivation operation as well as cannatourism business. It required the neighbors to file a lawsuit to get him shut down. Note that cannatourism is furthermore forbidden by the Cannabis Ordinance. A player who so blatantly disregards the law is not someone Sonoma County should ever consider to allow to obtain a permit. I assume the county must have run a full background check on him and if so, what are the findings? The Cannabis Ordinance does not allow anyone who had a permit revoked to apply for a new permit for 2 years. This same standard needs to be applied to someone who illegally operated without a permit.
- 2) The location is completely in conflict with the surrounding residential area. The Cannabis Ordinance specifies minimum setbacks, whereas the applicant seems to view the listing of a minimum setback as fully adequate. The overriding section of the Cannabis Ordinance, 26-88-250(f), states:
- (f) Health and Safety. Commercial cannabis activity shall not create a public nuisance or adversely affect the health or safety of the nearby residents or businesses by creating dust, light, glare, heat, noise, noxious gasses, odor, smoke, traffic, vibration, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, runoff or wastes.

This section trumps any minimum setback listed. The fact that the applicant operated illegally actually has one significant benefit in evaluating this application now, as the <u>neighbors have</u> confirmed that this operation violated the above Health and Safety section. The public nuisance of traffic, noise, and noxious gasses and odor were directly experienced. This alone is cause to deny this application.

3) Odor is one of the very deleterious impacts on neighbors. Cannabis odor travels well over 300 ft. I have experienced overpowering odor 700 ft from a neighbor's outdoor grow of only 10,000 sf, uphill and separated by thick tree cover, preventing use of the yard and requiring windows to be closed at night. Neighbors 1200 ft away (likewise separated by thick trees) have also experienced

the noxious odor. I have experienced odor from an outdoor grow over 2000 ft away. Trees do not mitigate the odor, nor does a fence, nor does the unknown idea mentioned of vapor-mist - which is unproven for outdoor grows (and in itself would create a whole separate set of issues on potential harmful effects from those untested compounds). I know of residents living hundreds of feet from cannabis cultivation operations who experience severe sickness from these compounds.

The fact that some dairy farmers spread manure during summer months is not a solution to the odor problem; that only compounds the situation. It is ludicrous to even mention this; two bad smells don't make a right.

- 4) Security and crime are major issues. Just from the physical side, a 7 ft tall chain link fence with green plastic slats, topped by one foot of barbed wire, is just plain ugly and definitely does not belong in residential neighborhoods. Rose bushes will not hide this! However, of paramount issue is the risk of crime that comes with commercial cannabis operations. These have both a high value crop but also can have large amount of cash on site, as banks are not an option, and are known to attract crime. There are many examples of the crime even murder- that has increased in Sonoma County in recent years directly associated with cannabis. To speak form personal experience, I have directly been the victim of collateral crime due to a cannabis operation at the end of where I live, a 2.5 mile long road with ~16 homes, where every one whose car was not locked was robbed in the middle of the night from people targeting the cannabis operation. Cannabis operations unfortunately attract criminals. It is totally wrong to allow this type of operation in residential neighborhoods, period.
- 5) Water use: The applicant lists a ridiculously low amount of water usage for his outdoor grow, citing 0.05 acre feet/year for 28,560 sf. The figures used by Sonoma County for an outdoor grow are 2 acre ft/year for one acre, which is 1.31 acre ft for a 28,560 sf grow. This is consistent with applicant's disregard for the facts and avoiding statements that might make his application look poor. Quite the contrary such uninformed statements make this application even worse.

In summary, this application should be denied.

Thank you for reading these comments and please enter them into the file for 334 Purvine Road (UPC17-0020).

Sincerely,

Deborah Eppstein, PhD Santa Rosa, CA 95409

From: craigspencerharrison@gmail.com

Sent: March 26, 2019 2:01 PM

To: Crystal Acker

Cc: nopotonpurvine@gmail.com

Subject: Objections to Proposed Cannabis Permit at 334 Purvine Road (UPC17-0020)

Attachments: 334 Purvine Road Comments.pdf; Attachment 1 SOSN Poll.pdf

Dear Ms. Acker:

Here is a PDF of my objections together with a supporting attachment.

Please acknowledge receipt.

Craig S. Harrison Santa Rosa

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

Comments on Proposed Marijuana Cultivation at 334 Purvine Road

The proposed commercial marijuana cultivation permit at 334 Purvine Road (UPC17-0020) should be denied for the reasons discussed below. The proposed activity is incompatible with the rural residential character of the area and diminishes the quality of life of other residents on that road. It is the wrong place for this facility.

Most residents of the Dairy Belt believe that it should be designated a cannabis exclusion zone. The Board of Supervisors has thus far refused to allow exclusion zones despite the fact that seventy percent of Sonoma County voters think that individual communities should be granted the power to create exclusion zones that ban commercial marijuana cultivation.¹

I. Required Findings Under Zoning Code.

Before the County can approve any conditional use permit under the Zoning Code, it must find that the proposed use is not detrimental to the health, safety, peace, comfort or welfare of the neighborhood or the general public. Sonoma County Code section 26-92-070(a). In addition, under section 26-88-250(f), the standard is more specific for issuance of a commercial cannabis permit. Any grow operation:

shall not create a public nuisance or adversely affect the health or safety of nearby residents or businesses by creating dust, light, glare, heat, noise, noxious gasses, odor, smoke, traffic, vibrations, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, runoff or wastes."

No reasonable decision maker could make this finding about a commercial cannabis cultivation project on Purvine Road. The county's population is about 500,000, and County officials estimate there are about 5,000 growers (99 to one). There is no history of commercial marijuana cultivation on Purvine Road before the Cannabis Ordinance was adopted, and here the discrepancy between the number of growers and non-growers is even more skewed.

The operators had no connection with Purvine Road before the Cannabis Ordinance was adopted. It should be easy to weigh the interests of Purvine Road residents, whose health, safety, peace, comfort, and general welfare should be paramount, against individuals whose sole interest in disturbing the peaceful community is to maximize profits in a lucrative and disruptive commercial activity. This project grow essentially uses the Purvine Road neighborhood as a shield to hide from criminals who invade homes to steal cash or marijuana.

II. The Promoters Are Chronic Scofflaws

A state judge recently enjoined this operation when the neighbors sued because he found innumerable violations of law. The violations include launching a cannabis tourism operation; advertising tours of its operation and selling product; and renovating the property for the purpose of hosting visitors and events, including space for group dinners and a bar.

¹ Save Our Sonoma Neighborhoods Press Release (July 16, 2018), Attachment 1.

In 2016, the SEC fined and suspended the securities license of the applicant's CEO for insider trading and required his company to disgorge profits and pay penalties of \$8.9 million. In 2007, the ABC fined and suspended the alcoholic beverage license of Magruder & Crum LLC, a company in which the applicant's COO, Sam Magruder, was a principal. It appears that Magruder hid his ownership interest in the company from the ABC, a serious offense.

These activities show disrespect for the neighborhood and a belief that the applicant is above the rules. The applicant has a history of gaming the County code enforcement system. As shown below in Section VI.2., the County cannot responsibly enforce its cannabis ordinance.

Under the Sonoma County Code section 26-88-252(d)(4), if the owner had a cannabis permit the "three strikes penalty" would be invoked. Any combination of three administrative citations, verified violations, or hearing officer determinations of violation of any of the permit requirements or standards at any property or combination of properties of the same owner or operator within a two-year period, the cannabis permit would be revoked at the subject property for a minimum period of two years.

The best indicator of future behavior is past behavior. No rational permitting agency would want this owner to be involved in a cannabis operation. It would be continual trouble for Permit Sonoma and the neighborhood.

Simply because of the behavior of the owner of this property, the permit application should be denied with prejudice. There is no way any rational permitting agency could conclude this application meets the requirements of Sonoma County Code section 26-88-250(f). It would create a public nuisance and adversely affect the health or safety of nearby residents.

III. Commercial Marijuana Development Does Not Belong on Purvine Road.

U.S. Attorney McGregor Scott in Sacramento describes marijuana grows as "industrial agriculture." The activity intensely uses water, fertilizers, pesticides, and labor and seems to involve more manipulation and processing of plants than growing them. The cultivation process is akin to an open-air laboratory that grows algae for biofuels. Much of the grows uses soil brought in from elsewhere. The Cannabis Ordinance, section 26-02-140, explicitly excludes cannabis from being an "agricultural crop" because marijuana poses unique risks to the health, safety, and welfare of residents.³ This site purportedly will have ten full-time employees,⁴

² Don Thompson, "Agents seize Northern California pot houses tied to Chinese" (April 4, 2018) https://www.vcstar.com/story/news/2018/04/04/agents-seize-northern-california-pot-houses-tied-chinese/488258002/

³ In adopting the Cannabis Ordinance, the Board found that those risks include fire hazards, criminal activity, unpleasant odors and other impacts on neighbors, groundwater and other environmental impacts, and the product's potential as an attractive nuisance for children (Ordinance No. 6189, Findings, section I, subsections I, N, O and Q).

⁴ Expanded Initial Study, p. 59.

although surely seasonal trimmigrants will be employed as well. This is a medium-sized business and permitting it to operate on Purvine Road is out of character for the quiet, rural community.

Dairy Belt residents are not unique with regard to their concerns about living near cannabis cultivation. The Wickers Group conducted telephone interviews with a statistically chosen sample of Sonoma County residents who voted in the November 2016 election. They found that County residents are not comfortable living near marijuana cultivation. More specifically, 75% want to live at least 1/4 mile away; 62% want to be at least ½ mile away; and 52% at least one mile away. Only 19% would be comfortable living adjacent to a grow. These findings are similar to, but more detailed than, a poll taken by The Press Democrat.

The proposed outdoor and mixed light grows are well-known to emit a stench. Supervisor Lynda Hopkins remarked that "she was surprised by 'how pungent' the plants were." The New York Times has recently written about the stench from marijuana plants. An editorial by the Chicago Tribune begins with "Marijuana sticks."

IV. Commercial Marijuana Development Undermines Public Safety.

Home invasions related to marijuana grows have become increasingly common in Sonoma County, and the risks of criminal activity is a major concern to rural residents. In many cases non-growing neighbors have been terrorized when the "wrong" home is invaded. The Board of Supervisors recognized this problem in the Cannabis Ordinance. There are already insufficient sheriffs on duty, especially at night when home invasions tend to occur. It can take a long time for a sheriff to respond to a call. Permitting commercial cannabis grows on Purvine Road would introduce a previously unknown and dangerous activity into our community that can attract violent criminals.

According to information obtained from Sheriff Mark Essick, since 2013 ten marijuana-related murders and 22 marijuana-related home invasions have been reported in the unincorporated areas of Sonoma County. These numbers would increase substantially if the cities were included. In August, three men were arrested for kidnapping and attempted murder at a grow in the County's

⁵ Save Our Sonoma Neighborhoods Press Release (July 16, 2018).

⁶ Guy Kovner, Press Democrat Poll finds sharp division in Sonoma County over cannabis cultivation (June 3, 2018), http://www.pressdemocrat.com/news/8366486-181/press-democrat-poll-finds-sharp

⁷ Guy Kovner, Press Democrat Poll finds sharp division in Sonoma County over cannabis cultivation (June 3, 2018), http://www.pressdemocrat.com/news/8366486-181/press-democrat-poll-finds-sharp

⁸ Thomas Fuller, 'Dead Skunk' Stench from Marijuana Farms Outrages Californians (December 19, 2018), https://www.nytimes.com/2018/12/19/us/california-marijuana-stink.html?module=inline

⁹ Deodorizing marijuana (January 2, 2019), https://www.chicagotribune.com/news/opinion/editorials/ct-edit-marijuana-smell-farm-nuisance-20181224-story.html

 $^{^{\}rm 10}$ Ordinance No. 6189, Findings section I, subsection O.

permit program.¹¹ The Sheriff's department has recently begun tracking marijuana-related crimes that do not involve murder or home invasions. In the four months from late April to late August, twenty marijuana-related crimes were reported (five per month). When the deputy sheriffs are better-trained to use this new system, Sheriff Essick believes more such crimes will be reported.

It is obvious that the County's cavalier approach to marijuana grows has opened the door to a dangerous activity in the Dairy Belt.

The County recognizes the dangers of marijuana cultivation when it comes to protecting its own employees. In eliminating the mandatory minimum 24-hour notice for an inspection of a cultivation, the code enforcement staff "for safety" will still call in advance so the visit is expected."¹² The County is rightfully concerned for the safety of its staff, but has less concern for residents who are asking the County not to allow marijuana cultivation in their neighborhoods.

V. Commercial Marijuana Development Is Not "Agriculture" Within the Meaning of the BV Plan, Federal Law, State Law, or the Cannabis Ordinance.

Section 26-02-140 of the Cannabis Ordinance explicitly excludes cannabis from being an "agricultural crop" because, unlike other crops, marijuana poses unique risks to the health, safety, and welfare of residents. In 2016, the supervisors found:

The Cannabis Act [Medical Cannabis Regulation and Safety Act] and the proposed zoning ordinance both distinguish cannabis from other types of agriculture. This is due to the federal classification as a Schedule I drug, the security concerns associated with a high value crop, and the unique characteristics of the cannabis operations. Cannabis cultivation operations are not protected under the Right to Farm Ordinance which is intended to protect agricultural operations from being considered a nuisance. ¹³

Whatever marijuana may be, *ipso jure*, it is not an agricultural product under the law in Sonoma County. Commercial cannabis is not "agriculture" under federal law or California law.

VI. CEQA: Changed Circumstances Issues.

CEQA review for this project requires the disclosure and evaluation of potential environmental impacts, including cumulative and reasonably foreseeable impacts. Substantial changes in circumstances since the ordinance was adopted reveal significant new environmental effects that

¹¹ Susan Minichiello, Three men arrested for kidnapping, attempted murder at Santa Rosa marijuana farm (Aug. 13 2018). https://www.pressdemocrat.com/news/8631161-181/three-men-arrested-for-kidnapping?sba=AAS

¹² Memo from Amy Lyle, Permit Sonoma, to Sonoma County Planning Commission, "Cannabis Ordinance Amendments, ORD18-0003 (September 6, 2018), p. 2 [sic]. Actually p. 3.

¹³ Ordinance No. 6189, Findings, section I, subsection I.

the County did not analyze previously and has failed to do so. CEQA Guidelines section 15162(a).

1. Declines in Property Values for Residences Located Near Grows.

Some operators assert that properties that are permit-eligible for cannabis cultivation have seen an increase in value since 2016. This is an example of how asking a misleading question provides an irrelevant answer. The information that needs to be disclosed is the effects of inserting a marijuana grow into a rural neighborhood on the value of existing residences that are not involved in the marijuana business.

There is now sufficient experience in Sonoma County to undertake an empirical study on the effects of proposed commercial marijuana permits on the value of nearby residences. The study should include all of the following projects: UPC17-0023 (5000 Lakeville Highway, Lakeville); UPC18-0018 (3062 Adobe Road, Petaluma); UPC17-0095 (3215 Middle Two Rock Road, Petaluma); UPC18-001 (885 Montgomery, Sebastopol); UPC17-0067 (5364 Palmer Creek Road, Healdsburg); APC17-011 (8105 Davis Lane, Penngrove); UPC18-0027 (6877 Cougar Ln, Santa Rosa); UPC18-0037 (2260 Los Alamos Road, Santa Rosa) ZPC17-009 (2108 Schaeffer Road, Sebastopol), 1400 Freestone Valley Ford Road, Valley Ford (APC17-0015) and 1478 Freestone Valley Ford Road (APC17-069).

It may be true that if a parcel of land in rural Sonoma County were sold to a developer of a hog farm, cattle feedlot, sewage treatment plant, marijuana grow, nuclear waste disposal site, or oil refinery that the selling price might be above market value if there seemed any chance that the necessary permits could be obtained. But surely the values of nearby residential properties would diminish. Most Sonoma County voters are uncomfortable living near marijuana cultivation. With 36% of County voters not wanting to live within five miles of a grow, 62% not wanting to life within a half mile of a grow, and 75% not wanting to live a quarter mile from a grow, ¹⁴ it defies common sense to assert that commercial marijuana cultivation does not depress property values of nearby residences. After legalization in Colorado, homes within a half-mile of a marijuana business suffered lower property values. ¹⁵ In this case, the value of residences on a milelong road that is shared with a commercial marijuana operation would find far fewer potential buyers.

2. The County Cannot Responsibly Implement Its Cannabis Program.

The eight-hundred-pound gorilla in the cannabis program is the fact that most everyone, publicly or privately, agrees that the ordinance and its implementation have been a disaster. Neighborhood groups are furious that County encourages cultivation near their homes because

¹⁴ Save Our Sonoma Neighborhoods Press Release (July 16, 2018).

¹⁵ Hudson Sangree, "If a marijuana grow warehouse opens nearby, will your home value suffer?" (September 17, 2017) http://www.sacbee.com/news/business/real-estate-news/article173621656.html

when growers cause problems, 16 they have to live with it for at least six months and often years. Growers are unhappy. 17

County officials seem frustrated and tired of dealing with marijuana problems. 18

There are several plausible explanations for poor implementation: (1) Permit Sonoma is overwhelmed and has inadequate staff or financial resources; (2) the Cannabis Program Director, county counsel, and Permit Sonoma lack the will to enforce the law because they desperately want a failing program to succeed; (3) County staff are incompetent.

It doesn't matter which explanation(s) is correct. The end result is identical for people who are subjected to marijuana cultivation.

An overarching cause of the problems stems from the County's decision in 2016 not to comprehensively study the issues and engage in normal land use planning. Instead, it cut corners in the CEQA process by issuing a Negative Declaration instead of an environmental impact report. "The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided." "An EIR is an 'environmental alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." 20

But there are none so deaf as those who do not want to hear. Had the County done an environmental impact report, it could have mitigated or avoided many of the problems that plague neighborhoods. Other problems stem from a poorly conceived and even more poorly implemented penalty relief program, discussed below.

¹⁶ Thomas Fuller, 'Dead Skunk' Stench from Marijuana Farms Outrages Californians (December 19, 2018), https://www.nytimes.com/2018/12/19/us/california-marijuana-stink.html?module=inline

¹⁷ A lawyer for growers called "the marijuana regulations 'illusory' and said the county's rules are entrapping cultivators 'into a sphere of illegality' by giving false promises to clients like his 'who are trying to do nothing other than be a lawful cultivator.' Julie Johnson, "Neighbors file federal lawsuit to shut down Sonoma County cannabis grower." Press Democrat (Aug. 31, 2018). https://www.pressdemocrat.com/news/8684268-181/neighbors-file-federal-lawsuit-to

¹⁸ Supervisor Rabbitt called for a moratorium at the August 7, 2018 board meeting. Supervisor Gorin wrote "our county and the state were not ready for the intense planning to implement this. What we are experiencing now in the county confirms my original opinion." Cannabis: How Close is Too Close? Sonoma County Gazette (July 31, 2018). https://www.sonomacountygazette.com/sonoma-county-news/cannabis-cultivation-in-sonoma-county-the-debate-continues

¹⁹ Public Resources Code section 21002.1(a).

²⁰ Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376, 392.

7

It is past time for a pause in an irresponsible program. The County should frankly and openly admit error, analyze what went wrong, and implement solutions to the problems.

The County's incompetence in implementing the ordinance is new information of substantial importance that shows that it will have significant environmental effects that were not analyzed in the Negative Declaration. CEQA Guidelines section 15162(a). The County should suggest how the problems can be mitigated or avoided going forward. The County should not issue any new permits until it can demonstrate that it has the tools, resources, and will to administer its program and can expeditiously protect residents. It also must demonstrate it has the will to faithfully execute its own ordinances and policies. If those tools and resources do not exist, or if the County cannot insure the rule of law, it should stop commercial cannabis cultivation altogether. Dispensaries in Sonoma County can purchase marijuana from other California counties.

What follows are twelve examples of problems in the implementation of this program. One could write a treatise on this subject.²¹

Example 1. **3062 Adobe Road, Petaluma (UPC18-0018).** Sonoma County's management of its marijuana cultivation program is so poor that four families in Petaluma had to file a federal Racketeer Influenced and Corrupt Organizations Act (RICO) suit to shut down a grow that was wreaking havoc on their homes. They suffered noxious odors that caused significant breathing problems, including to a young paraplegic who uses a breathing tube. The illegal grow was reported to the county in April, and the County sent a notice ordering the company to cease all cannabis activities on May 29. Yet in late August marijuana was still being grown and causing problems. The County settled the case after the RICO suit was filed by agreeing to let the grow continue until November 1st when the growers agree to a \$400,000 penalty that appears to be a bribe that allowed several million dollars of marijuana to be sold on the black market. This indicates the County lacks the will or the tools to shut down an illegal grow for six months. ²³

Example 2. **6583 St. Helena Road, Santa Rosa (UPC17-0043).** For over eighteen months, neighbors of this grow were fearful for their safety due to the growers' possession of firearms and threats of home invasions. The County issued notices of violation for three illegally-constructed greenhouses and unpermitted electrical installations in September 2017 but did little to resolve them. The electrical violations could cause wildfires. The growers installed

²¹ Other permits that could be studied include: UPC17-0095 (3215 Middle Two Rock Road, Petaluma); UPC18-0027 (6877 Cougar Lane, Santa Rosa); 1400 Freestone Valley Ford Road, Valley Ford (APC17-0015); and 1478 Freestone Valley Ford Road (APC17-069).

²² Julie Johnson, "Neighbors file federal lawsuit to shut down Sonoma County cannabis grower." Press Democrat (Aug. 31, 2018). https://www.pressdemocrat.com/news/8684268-181/neighbors-file-federal-lawsuit-to

²³ Julie Johnson, "Petaluma-area cannabis farm whose neighbors sued agrees to shut down." Press Democrat (Aug. 31, 2018). https://www.pressdemocrat.com/news/8692175-181/petaluma-area-cannabis-farm-agrees

unpermitted high-intensity electric lights without coverings. On foggy nights the illumination appears to be a wildfire. On one occasion, three fire departments deployed for a false alarm. In August, three men were arrested for kidnapping and attempted murder there.²⁴ They had a rifle on the premises, contrary to the ordinance. The County issued a notice to the operator to stop growing on August 14, and the operator appealed. A hearing was held on September 7, and the hearing officer was scheduled to decide in late September or October. Then more appeals are possible. It is taking over eighteen months to resolve an intolerable situation.

Example 3. **5000 Lakeville Highway, Petaluma (UPC17-0023).** For about two years, residents on a small lane were subjected to noxious marijuana odors. The grower was operating within the 300-foot setback to a home, contrary to law. Code enforcement officers failed, neglected, and refused to shut down the grow because they were in the penalty relief program. For four weeks the neighbors were exposed to vicious dogs that got loose when a security gate was left open. Contrary to the ordinance, they illuminated bright lights on many nights when no one at Permit Sonoma was on duty. One resident filed a complaint in January and was almost immediately told the issue was resolved. Yet the stench lingered. Permit Sonoma does not investigate complaints on weekends, holidays, or between 5 PM in the evening and 8 AM in the morning, while growers operate constantly. Finally, Permit Sonoma shut down the grow and it did stop in August after the grower's appeal to the Board of Supervisors failed.

Example 4. **5364 Palmer Creek, Healdsburg (UPC17-0067)**. Since the purchase of the property in June 2016, the operator has never had a legal source of water yet is now completing his second harvest season. Contrary to section 26-88-250(g)(10) and the Penalty Relief Program, the operator has exclusively used trucked water. The operator has been hauling recycled waste water day and night and a commercial potable water supplier has been delivering water daily to the grow. Residents have been reporting violations to code enforcement since November 2017. The County allowed the operation to continue unabated until recent complaints resulted in an agreement to shut down. The County has been allowing the current harvest to be sold despite the fact that the grower has no State license. The marijuana is apparently sold on the black market in violation of California and federal law.

Example 5. **2260** Los Alamos Road, Santa Rosa (UPC18-0037). For fifteen months, the County has allowed the applicant to grow marijuana without complying with the Cannabis Ordinance. Satellite images indicate the small grow in June 2017 expanded to 47,000 square feet in October 2017. Despite exceeding the one-acre limit, paying taxes on only 35,000 square feet of cannabis, violating the ordinance by being plainly visible from the entrance of Hood Mountain State Park, and submitting an application that omitted ten required items, the County allowed the grower to continue past the June 1st deadline for a complete application. The County took a month to declare the application incomplete, and then extended the deadline another month. The County eventually sent a cease and desist letter, but the grower appealed. By this time, satellite

²⁴ Susan Minichiello, Three men arrested for kidnapping, attempted murder at Santa Rosa marijuana farm (Aug. 13 2018). https://www.pressdemocrat.com/news/8631161-181/three-men-arrested-for-kidnapping?sba=AAS

imagery shows he had illegally expanded to 1.5 acres. At this point, the County could have assessed \$280,000 in penalties but instead stopped the proceeding to evaluate other issues. Today he is still being allowed to grow, without a state license, and just harvested a lucrative crop that will probably be sold on the black market. Despite failing to provide a hydro-geo report and having insufficient water, the County has granted his request to drill a third well. The County seems eager to cater to illegal growers.

Example 6. 885 Montgomery Road, Sebastopol (UPC18-0001). Since at least April 2017, the non-resident owner of a ten-acre parcel near Sebastopol has leased the property to a third party to grow about an acre of commercial marijuana. Forty-six families live within a 1,000-foot radius, and seven of them border the flag lot. Thousands of outdoor plants are located just a few feet from gardens, barbeques, a horse dressage arena, and homes. The stench, noise, and fear of an armed conflict has made the lives of neighbors miserable while reducing their property values. Some wear masks when they spend more than fifteen minutes outside to avoid feeling nauseous or getting a headache. For a year, County officials have ignored neighbor complaints about odor, noise, night light pollution, and security cameras trained on neighboring homes. The County failed, neglected, and refused to verify false statements in the grower's Penalty Relief Application Form. The County has allowed the grower to use power circuits that were installed without permits, exposing neighbors to fire risks. The County refused to shut the grow down after violations of the Cannabis radiance including illegal grading, terracing, and tree removal. The operator is completing the second year of harvest without a County permit. County officials tricked the State of California to issue the operator a temporary license to allow it to sell cannabis in dispensaries. For over a year, the County has shown no desire to stop activities that are ruining the ability of this neighborhood to conduct normal life.

Example 7. 7777 Cougar Lane, Santa Rosa (no cannabis application). Since at least 2008 the owner has been reported multiple times for illegal construction and electrical violations. The Fire Marshall, Sheriff, and Permit Sonoma could see the illegal activity but refused to act without a warrant. In 2011 at the urging of Supervisor Brown, Permit Sonoma ordered the unpermitted construction to be removed, but the County never enforced the order. Similar complaints were filed in 2013 but the County failed again to act. The County issued citations for illegal construction in February 2018 and for illegal cannabis in May 2018 and the marijuana was then removed. The owner failed to appear for hearing on his illegal construction on September 14th 2018 but there is still no abatement. The County's countenance of unlawful behavior for a decade has been an invitation to illegal marijuana grows.

Example 8. **3803 Matanzas Creek Lane, Santa Rosa** (**UPC17-065**). This Bennett Valley property was purchased by investors near Chicago in February 2017 who immediately began an outdoor or mixed light marijuana grow because the County allows anyone to grow under its Penalty Relief Program, not just historical growers in Sonoma County. On September 8, 2017, Permit Sonoma issued a Notice of Violation to the owner for building a greenhouse without a permit. Permit Sonoma did nothing to resolve this. The County should have shut it down pursuant to section 26-88-254(f)(3) on January 1, 2018 because it is located within 1,000 feet of North Sonoma Mountain Regional Park. On March 4, 2018 senior County officials, including the

director of Permit Sonoma and Supervisor Susan Gorin, were asked to consult the County's Cannabis Site Evaluation Map and confirm that this parcel was categorically ineligible. They agreed. Then for five months, the County dithered while the owner grew marijuana. On July 31, 2018, Permit Sonoma sent a notice of violation to the operator. The grower continued to cultivate and harvest marijuana. On September 10, 2018 Permit Sonoma sent a "Notice & Order—Unlawful Commercial Medical Cannabis Use" to the owner and demanded the marijuana be removed within seven days. The owner appealed and the process dragged out until the owner has harvested a full season (two or three crops) of marijuana, all of which is illegal under the County ordinance. Then Permit Sonoma rescinded its Notice and Order because the revised ordinance in October allows the setback from parks to be relaxed. County staff decided that this project qualified for a setback behind closed doors without public input.

Example 9. **8105 Davis Lane, Penngrove (APC17-0011).** This vacant 5.5-acre property is zoned diversified agriculture and was leased by an investor in Sebastopol in mid-2017. Without advance notice to surrounding neighbors, or any opportunity for them to object in a public hearing, the County issued a "ministerial" permit in February 2018. The permit allows the investor to grow commercial marijuana outdoors because the applicant merely satisfied a short list of perfunctory requirements. The neighbors had no opportunity to protest beforehand or appeal afterwards, and the only remedy is expensive litigation. No one in the unincorporated residential neighborhood of small properties engages in commercial agriculture. The operators don't have a house there, so a home invader could easily mistake the home of an innocent neighbor as a location of large amounts of cash or marijuana. The majority of the risks and undesirable effects, such as loss of property value and inescapable noxious odors, are all borne by the neighbors. The supervisors increased the minimum lot size of commercial grows to ten acres in October 2018, but did nothing to void this permit or discontinue future use of similar ministerial permits. Indeed, the permit might be renewed in 2019 and extended up to 5 years.

Example 10. **2108** Schaeffer Road, Sebastopol (ZPC17-0009). This 2.4-acre property that is zoned DA has been used to cultivate marijuana long before the 2016 Cannabis Ordinance was adopted. It has had innumerable building code violations for years. The County allowed the growers to continue to cultivate under the protections of the Penalty Relief Program when they applied for a commercial cannabis permit. The property has only a 21-foot setback when the zoning code requires 50 feet, and this defect cannot be cured. The County failed to act responsibly to shut down the grow immediately. In late 2018, the County stated it will tell the operator that the permit will be denied, but the cultivator can still file various appeals. The neighbors have been subjected to an illegal marijuana grow for two years since the Cannabis Ordinance was adopted, and may have to continue to suffer this nuisance for many more months.

Example 11. **Failure to Enforce Explicit Terms of Penalty Relief Program**. The temporary code enforcement penalty relief program (PRP) was instigated and revised in 2017 with little notice to or involvement from the public. The PRP has explicit requirements that County officials at every opportunity have decided to ignore or overrule without authority. Building code violations were not addressed until the PRP ended on June 1, 2018. The authorizing ordinance did not empower Permit Sonoma or the cannabis program manager to ignore illegal greenhouses,

wiring, or other code violations. Growers had to commence cultivation by July 5, 2017 and were explicitly forbidden to increase the size of their grow after that date. Growers have cheated brazenly, and no official attempts to verify the facts. A Permit Sonoma official or contractor could easily investigate many violations using satellite imagery from the comfort of the office and at the expense of the grower.

Under the program, growers had to remain current with cannabis taxes. In April when neighborhood groups pointed out that many were not current, County officials did not remove them from the PRP. Instead they sent courtesy letters pleading for payment.

Dozens of growers got a "get out of jail free card" for a growing season by submitting a one-page PRP form without even a fig leaf of an application for a permit. When confronted, County officials took no action to shut down the illegal grows.

County officials repeatedly invented ways of "finding ambiguity in a Stop sign" to allow growers to violate County ordinances or the PRP requirements. Their decision making was ad hoc, opaque, arbitrary, capricious, and contrary to law. But they felt safe that no one would file suit and ask judges to provide some adult supervision. Citizens watched this unfold with horror and became confused, bewildered, and increasingly embittered. Why should anyone trust the County to enforce any provisions in any permit or the ordinance? Now that lawsuits are beginning to be filed, the County is finally trying to shut down grows. It is apparent that some County staff actions and advice to growers have compromised the County's legal position and may subject the County to huge legal liabilities. This is intolerable incompetence.

Example 12. **4065 Grange Road, Santa Rosa (UPC17-0082).** This 4.9-acre property was conveyed from an 80-year-old female Bennett Valley resident to Bennett Rosa LLC in late August 2017. The LLC operator claimed on its Penalty Relief Application forms that the grow began June 30, two months before Bennett Rosa LLC owned them and just before the July 5 deadline for eligibility. None of the LLCs were registered before mid-July. Satellite imagery shows that the grow on the 4.9-acre parcel had not begun on July 9, 2017. The County has ignored complaints about this grow since March, and in June was asked to require the operators to produce ordinary business records (contracts, checks, identity of workers who can be interviewed, proof of purchase of plants, work orders, labor contracts). They apparently have not done so. If the operators provided false or misleading information, the County by law must reject the applications. The County allowed the 2018 harvest to be sold despite the fact that the growers lack State licenses and the marijuana is probably sold on the black market. Like Alfred E. Newman, the County's attitude seems to be "What me worry?"

In sum, the implementation of the County's cannabis program has been an embarrassment to the concept of good governance. The premise of issuing this permit and its mitigated negative declaration is that the county is ready, willing and able to solve any problems that may arise. Nothing could be further from the truth.



July 16, 2018

PRESS RELEASE

Contact: <u>info@sosneighborhoods.com</u>; (707) 559-8563

Poll Results on Marijuana Cultivation

Save Our Sonoma Neighborhoods commissioned The Wickers Group to conduct telephone interviews with a statistically chosen sample of Sonoma County residents who voted in the November 2016 election. They were surveyed from June 15-19, 2018, and the results have a margin of error of 5.7%.

Here are the responses to this question: "In what proximity to your own home would you feel comfortable having one of these cannabis growers?"

			<u>Cumulative</u>
•	Adjacent	19%	
•	At least 1/4 mile	13%	75%
•	At least ½ mile	10%	62%
•	At least 1 mile	16%	52%
•	At least 5 miles	16%	36%
•	No distance is OK	20%	20%

Over half of Sonoma County residents (52%) are not comfortable living within a mile of a commercial marijuana grow, and the overwhelming majority (62%) want grows at least one-half mile (2,640 feet) from their homes. There is little difference among the supervisorial districts, or between rural and urban voters. For example, in West County (supervisorial district 5), slightly more are uncomfortable with living any distance from a grow (no distance is OK 24%), but slightly fewer (67%) want to live at least one-quarter mile away.



The poll found overwhelming agreement (2-1 or 3-1) with these statements:

- Individual communities should be granted the power to create exclusion zones banning marijuana cultivation.
- All parts of marijuana cultivation operations should be screened from public roadways, including the plants themselves and accessory structures.
- Commercial marijuana cultivation's potential water and soil pollution due to fertilizer and chemical runoff is a significant environmental concern.
- Code enforcement of marijuana businesses should be a joint effort between PRMD and the Sonoma County Sheriff.
- The Cannabis Advisory Group should be composed of no more than 50% of its members from the cannabis industry.

The poll found majority agreement with these statements:

- Permits for marijuana cultivation should be restricted to people who have lived in Sonoma County for five years or more.
- Marijuana growers should not be allowed 24 hours notice prior to inspections of their facilities for compliance checks.



Save Our Sonoma Neighborhoods urges the supervisors to listen to Sonoma County residents who are not part of the vocal one percent who grow marijuana.

We respectfully request the following at their meeting on August 7:

- 1,000-foot setbacks from homes so families don't have to live near commercial marijuana businesses.
- 20-acre minimum lot sizes for all zoning categories.
- A simple and speedy (less than six months) mechanism for communities to exclude commercial pot production from their neighborhoods.

SOSN is a coalition of neighborhood residents advocating common sense cultivation of commercial marijuana in Sonoma County. Learn more at www.sosneighborhoods.com/ and facebook.com/SaveOurSonomaNeighborhoods/

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From: Rachel Zierdt <rzierdt@gmail.com>

Sent: March 26, 2019 10:45 AM

To: Crystal Acker

Subject: 334 Purvine, Petaluma

Dear Ms. Acker,

I am writing today to voice my concerns about this application. The growers have been acting illegally, throwing cannabis parties, allowing minors to attend, as well as failing in other ways to comply with the county ordinance. By allowing this grow and grower to continue, the county is rewarding bad behavior. If the grower is doing this now, can you just imagine what will happen if the county gives a blessing to this project? I can foresee other growers being emboldened to enhance their grows and know that nothing will happen. This is added incentive for this grower to continue to flaunt the regulations.

When all of this came to light, it is indeed disturbing that this grow was not permanently shut down. The quiet Purvine neighborhood is now engulfed with awful odors and a neighbor who is far from being neighborly or law abiding.

Please place this protest into the file. PRMP has put their blessing on this project. It is a shameful for a county entity to disregard for our law abiding county residents and benefit a "bad actor."

Rachel Zierdt West County resident

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Grace Barresi <gmbarresi@gmail.com>

Sent: March 24, 2019 8:05 PM

To: Crystal Acker
Cc: Ayn Garvisch
Subject: 334 Purvine Road

Dear Crystal,

My husband, Robert, and I oppose the cannabis business at 334 Purvine Road and urge Sonoma County to deny the Conditional Use Permit. This cannabis business has created a nuisance to the surrounding neighbors. We have been to a neighboring home on Purvine road and witnessed the failure of the current cannabis ordinance to not adequately protect neighbors. Specifically, the minimum 300 foot setback for outdoor grows is totally inadequate.

The NY Times San Francisco correspondent, Thomas Fuller, felt compelled to feature one of these residents on Purvine Road, Britt Christensen, after visiting her property last October and experiencing first-hand the stench of the cannabis plants growing on 334 Purvine road. The bedroom window of Britt's son, a 2 year old toddle, was in close proximity to these cannabis plants last year. Imagine a child having to inhale noxious odors while sleeping or playing in his own room.

Here is the link of the NY Times article for your review. https://www.nytimes.com/2018/12/19/us/california-marijuana-stink.html

Another major oversight and failure of the current cannabis ordinance is regarding water usage for these businesses. Water is scarce in this part of Sonoma County and cannabis plants consume a minimum of 6 gallons per day per plant. A 1 acre cannabis cultivation can use several thousand gallons of water per month and over 1 million gallons per year. And yet the county allows these businesses to "self report" their water usage. I fear, as do the neighbors, that wells will run dry if this business is allowed to operate on Purvine Road.

Large scale commercial cannabis operations do not belong in the Petaluma dairy belt. **Deny this permit application** and allow the residents surrounding 334 Purvine Road to enjoy their lives again.

Thank you for your time,

Grace and Robert Guthrie Sebastopol

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

The New Hork Times

Dead Skunk' Stench From Marijuana Farms Outrages Californians

By Thomas Fuller

Dec. 19, 2018

CARPINTERIA, Calif. — They call it fresh skunk, the odor cloud or sometimes just the stink.

Mike Wondolowski often finds himself in the middle of it. He may be on the chaise longue on his patio, at his computer in the house, or tending to his orange and lemon trees in the garden when the powerful, nauseating stench descends on him.

Mr. Wondolowski lives a half-mile away from greenhouses that were originally built to grow daisies and chrysanthemums but now house thousands of marijuana plants, part of a booming — and pungent — business seeking to cash in on recreational cannabis, which has been legal in California since January.

"If someone is saying, 'Is it really that bad?' I'll go find a bunch of skunks and every evening I'll put them outside your window," Mr. Wondolowski said. "It's just brutal."

When Californians voted to legalize recreational marijuana in 2016, there were debates about driving under the influence and keeping it away from children. But lawmakers did not anticipate the uproar that would be generated by the funk of millions of flowering cannabis plants.

As a result of the stench, residents in Sonoma County, north of San Francisco, are suing to ban cannabis operations from their neighborhoods. Mendocino County, farther north, recently created zones banning cannabis cultivation — the sheriff's deputy there says the stink is the No. 1 complaint.



Cannabis buds on plants at New Family Farm in Sebastopol, Calif. Jim Wilson/The New York Times

In Santa Barbara County, cannabis growers confronting the rage of neighbors are spending hundreds of thousands of dollars installing odor-control systems that were designed for garbage dumps.

The smell from commercial cannabis farms, which brings to mind a mixture of rotting lemons and sulfur, is nothing like the wafting cloud that might hover over a Phish show, pot farm detractors say.

"It's as if a skunk, or multiple skunks in a family, were living under our house," said Grace Guthrie, whose home sits on the site of a former apple orchard outside the town of Sebastopol. Her neighbors grow pot commercially. "It doesn't dissipate," Ms. Guthrie said. "It's beyond anything you would imagine."

When cannabis odors are at their peak, she and her husband, Robert, sometimes wear respirators, the kind one might put on to handle dangerous chemicals. During Labor Day weekend, relatives came to stay at the house, but cut short their visit because they couldn't stand the smell.

"I can't be outside more than 30 minutes," Mr. Guthrie said of peak odor times, when the cannabis buds are flowering and the wind sweeps the smell onto his property. "The windows are constantly closed. We are trapped inside. There's no escape."



Britt Christiansen and her neighbors in Sonoma County banded together and sued the operators of a local pot business over the smell. Jim Wilson/The New York Times

After nearly one year of recreational sales in California, much of the cannabis industry remains underground. Stung by taxes and voluminous paperwork, only around 5 percent of marijuana farmers in the state have licenses, according to Hezekiah Allen, the executive director of the California Growers Association, a marijuana advocacy group. Sales of legal cannabis are expected to exceed \$3 billion this year, only slightly higher than medical marijuana sales from last year. Tax revenues have been lower than expected, and only about one-fifth of California cities allow sales of recreational cannabis. The dream of a fully regulated market seems years off.

The ballot measure legalizing recreational marijuana passed in 2016 with a comfortable majority of 57 percent. Many of those complaining about cannabis odors say they were among those who supported it. They just don't want it stinking up their property, they say.

"Just because you like bacon doesn't mean you want to live next to a pig farm," said Lynda Hopkins, a member of the Sonoma County Board of Supervisors, whose office has been inundated with complaints about the smell.

The odor question is also roiling local politics.

Marijuana businesses in Carpinteria recently donated \$28,000 worth of lab equipment to Carpinteria High School, according to Philip Greene, the chief of operations for Ever-Bloom, a cannabis producer that helped coordinate the donation. The high school is flanked by cannabis

greenhouses that have sent odors wafting in. In the past two years, students have complained of headaches, parents have grown angry and the high school has had to warn visiting sports teams that they might encounter the odor.

The donation has not yet been made public, but is seen by some as an effort to offset the damage done by the stench. In an interview, Maureen Foley Claffey, a member of the Carpinteria School Board, said it would send a "confusing and problematic" message to students to accept it. Ms. Claffey lashed out at the superintendent, Diana Rigby, for soliciting donations from the cannabis industry at a time when members of the community are battling the stink.



A Nasal Ranger, a device that measures the odors in the air. It is in use in Colorado, the first state to legalize recreational marijuana. Dave Kolpack/Associated Press

"Are we that desperate for cash that we are willing to take it from anyone without regard to the source and the message?" she said. "I guess money talks."

Ms. Rigby, the superintendent, did not return phone calls or email requesting comment.

In Sonoma County, hearings on cannabis ordinances at the board of supervisors overflow with representatives from the cannabis industry, who wear green, and angry residents, who wear red.

Of the more than 730 complaints Sonoma County has received about cannabis this year, around 65 percent are related to odor, according to Tim Ricard, the county's cannabis program manager.

"There's been a tremendous amount of tension in the community," said Ms. Hopkins, the Sonoma supervisor. "If I had to name an ice-cream flavor for cannabis implementation it would definitely be rocky road."

Cannabis executives recognize that pot grows can be odorous, but say their industry is no different from others that produce smells.



Dennis Hunter, right, a co-founder of CannaCraft, a marijuana business in Santa Rosa in Sonoma County, watching Matt Kulczycki filling a mold with cannabis-infused dark chocolate. Jim Wilson/The New York Times

"You have a smell issue that sometimes can't be completely mitigated," said Dennis Hunter, a cofounder of CannaCraft, a large marijuana business based in Santa Rosa in Sonoma County. "But we have dairy farms here in the area or crush season for the vineyards — there's agricultural crops, and a lot of them have smells."

Britt Christiansen, a registered nurse who lives among the dairy farms of Sonoma County, acknowledges that her neighborhood smells of manure, known locally as the Sonoma aroma.

But she says she made the choice to live next to a dairy farm and prefers that smell to the odor that drifted over from the marijuana farm next door to her house.

"We opened the door and the smell kicked us in the face," Ms. Christiansen said. Her neighbors banded together in October and sued the operators of the pot business; the case is ongoing.

One problem for local governments trying to legislate cannabis odors is that there is no objective standard for smells. A company in Minnesota, St. Croix Sensory, has developed a device called the Nasal Ranger, which looks like a cross between a hair dryer and a radar gun. Users place the instrument on their nose and turn a filter dial to rate the potency on a numerical scale. Charles McGinley, the inventor of the device, says a Level 7 is the equivalent of "sniffing someone's armpit without the deodorant — or maybe someone's feet — a nuisance certainly."



Lawmakers did not anticipate the uproar that would be generated by the funk of millions of flowering cannabis plants. Jim Wilson/The New York Times

A Level 4, he said, is the equivalent of a neighbor's freshly cut grass. "It could still be a nuisance, but it wouldn't drive you away from your front porch," Mr. McGinley said.

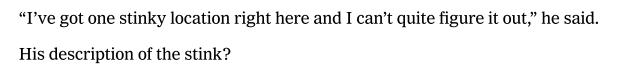
Standing next to a flowering cannabis bud, the smell would easily be a Level 7, Mr. McGinley said.

The Nasal Ranger is in use in Colorado, the first state to legalize recreational marijuana, but California counties and cities are still struggling with the notion that smells are subjective.

Ever-Bloom in Carpinteria is one of a number of marijuana businesses that have invested hundreds of thousands of dollars to mitigate the stink. Two previous systems failed, but the current one, modeled on devices used to mask the smell of garbage dumps, sprays a curtain of vapor around the perimeter of the greenhouses. The vapor, which is made up of essential oils, gives off a menthol smell resembling Bengay.

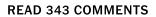
Dennis Bozanich, a Santa Barbara County official charged with cannabis implementation who has become known as the cannabis czar, says the essential oil odor control has been largely successful. But not every grower can afford to install it.

On weekends, Mr. Bozanich becomes a cannabis odor sleuth, riding his bicycle through Carpinteria sniffing the air for pot plants. He recently drove through the area with a reporter, rolling down the windows on a stretch of road with cannabis greenhouses. He slowed the car and puzzled over where a cannabis odor was coming from.



"Dead skunk."

A version of this article appears in print on Dec. 21, 2018, on Page A13 of the New York edition with the headline: Lucrative and Legal, But, Whew, It Stinks To High Heaven





From: Cindy <cindyrob@sonic.net>
Sent: March 24, 2019 8:25 PM

To: Crystal Acker

Cc:nopotonpurvine@gmail.comSubject:334 Purvine Road Marijana Permit

As a neighbor of 334 Purvine Road I am against a Pot Farm going in on Purvine Road. This is a rural area with strong Residential population. None of us near this property wants to live next door to a property with Guard Towers, wire/wood/concrete fencing, lights on all hours of the night and 24 hour operations. These are our homes and this business is not compatible with the neighborhood. I live above the King Dairy they have barbed wire to keep cows in not keep Criminals out!

Pot growing and the Cannabis experience needs to be contained in Warehouses not in our fields.

Cindy Roberts 64 Wilson Lane, X Street Middle Two Rock Road Petaluma, CA 94952

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Moira Jacobs <moiraajacobs@comcast.net>

Sent: March 24, 2019 3:05 PM

To: Crystal Acker

Cc:nopotonpurvine@gmail.comSubject:334 Purvine Road Pot application

Dear Ms. Acker,

I'd like to express my strong opposition to the planned project that would allow a commercial pot facility to operate at 334 Purvine Road:

- 1) First, the County must not disregard the fact that the entire neighborhood there is vociferously opposed to this site in their area, it is not compatible with that neighborhood;
- 2) There has never been any comprehensive EIR done for this entire commercial pot promotion program the County continues to try and ram down the throats of its citizens. When the County expanded this program from medical marijuana to ALL commercial marijuana, this triggered the requirement of a full EIR, which still has not been conducted, ignoring CA State environmental laws. This invalidates all the planned projects.
- 3) The County completely disregards the fact that over 70% of Sonoma County citizens do not want these marijuana drug operations located anywhere near them. The County must address neighborhood incompatibility issues now and change the ordinance! No more delay!
- 4) Traffic: there still has been zero review or consideration of the real traffic impacts this operation has on this area, let alone the dangers posed to the community of stoned drivers coming in and out of the narrow farm roads there.
- 5) Children: There are multiple families with children living in that neighborhood. They have a right to have their children completely protected from any proximity to an active drug manufacturing facility. Sonoma County must first protect children. At the bare minimum, any civilized society must protect its children and guarantee them safe, healthy, wholesome environments around their homes and schools. Thus this site must not be approved on this point alone.
- 5) Safety: it's proven that POT operations attract criminal elements and increase dangers to all those living nearby. This is common knowledge. Once again, keep residents, families and children safe! That is the number one job of local government.
- 6) Drug Manufacturing belongs in Industrial zones: These facilities are not traditional agriculture, they are fundamentally drug manufacturing operations. Just as Sonoma County would not approve a morphine manufacturing plant in this neighborhood, it likewise should not allow a THC or CBD processing operation there either.

We citizens opposed to this horrible policy are not going away, we live here. We represent the over 70% of Sonoma County citizens opposed to the siting of COMMERCIAL POT Manufacturing and Dealing operations being located in our family neighborhoods.

Soon the County will have new BOS officials replacing some of the current officials who will represent our views. Much of this extremely poor planning and misguided policy will be rewritten and scaled back.

In the meanwhile, keep POT off Purvine Road, away from all homes with children, and out of ALL rural residential neighborhoods of Sonoma County. If you must have POT, then produce it in a few carefully secured industrial areas.

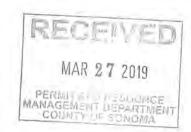
Thank you,

Moira Jacobs Santa Rosa, CA

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

March 23, 2019

Crystal Acker
Project Planner
Permit Resource & Management Department
2550 Ventura Avenue, Santa Rosa



Dear Ms Acker,

We are writing to you in response to the upcoming hearing for UPC17-0020 -the proposed permit for cannabis cultivation on Purvine Rd in Petaluma.

As a neighbor to this property, we are greatly concerned about this application and the potential impacts of a large-scale operation on our neighborhood, countryside and greater community.

As property owners in the neighborhood we have many concerns about this industry's impact on our area's water quality and availability. The safety of our community is also of importance.

We believe that the proposed plan will also contribute to increased theft, odor and traffic, and would have permanent effects on the cultural and natural landscape of our area.

66 bilar

Sincerely,

Colleen Mahoney and Veronique Anxolabehere

2781 Middle Two Rock Road

Petaluma, CA 94952

CC Supervisor David Rabbitt

EXHIBIT C

Public Comments
Public in Support

Dear Crystal,

My Name is Walter Collings and I live at 500 Purvine rd. My property shares a direct property line with 334 Puvine rd. I am writing to you about the proposed project at 334 Purvine road. I have lived on Purvine road for over 80 years. I grew up in the house on 334 Purvine and my family has lived here for generations raising chickens and farming.

I have had the opportunity to meet and spend a lot of time with the new owners of my family property. These are good people who are following the law and have designed a well thought out project. I support the cannabis cultivation project. People should be able to use their agriculture land for legal commercial agriculture. Cannabis cultivation is a legal activity in our state. I strongly support this project being approved as we need more opportunities to keep our AG lands in production for future generations. Many people move here from urban areas and try to turn our AG lands into their private playground pushing farms out.

Several of my neighbors oppose this project as they claim smell is an issue. This claim is a lot of hot air! Right across the street from our properties are row after row of cow dung and a big sludge pond full of more cow dung from the neighboring dairy ranch. Every September and October this sludge is loaded in trucks and spread all over the surrounding fields filling the air with the famous Sonoma aroma.

This project fits into our AG community, our neighborhood and I might even apply for a permit someday myself.

Walter Collings 500 Purvine rd

Walter Cellrigh

Petaluma

From: Jennifer J. Michaels <jenniferj.michaels@gmail.com>

Sent: April 04, 2019 8:20 AM

To: Crystal Acker

Subject: I support Cannabis Permit UPC17-0020 for 334 Purvine Road

Good Morning Crystal,

I am sending this email in support of the pending cannabis permit UPC17-0020 for 334 Purvine Road. The applicant has provided the necessary documents to prove that the proposed project satisfies all of the requirements of the cannabis land use ordinance and should be approved. The proposed project is located in Zone 2 water area and is on a larger parcel, a good distance from surrounding parcels. Also, the property is surrounded by other commercial agriculture business, which fits in with the designated zoning of the area, and will not impact traffic in the area.

Ultimately, the land use ordinance has set the guidelines for cannabis permits, and this project has proven to satisfy all of those requirements. Regardless of opposition, rules have been established and the applicant has provided ample evidence that this project qualifies for a cannabis cultivation permit.

Therefore, I strongly urge the County to issue a permit for this project.

Sincerely,

Jennifer Michaels

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Jason K <jasken74@gmail.com>

Sent: April 02, 2019 12:48 PM

To: Crystal Acker

Subject: Comments for UPC17-0020, 334 Purvine Rd.

Dear Crystal,

My name is Jason Kennedy.

I live in Sonoma County and also have a family and own a home and a business and I am familiar with the proposed project at 334 Purvine Rd.

I am writing to voice my support for this project as it meets and exceeds every aspect of the Sonoma County cannabis ordnance.

This property is located in Zone 2 water area and is a larger parcel not connected to a neighborhood. The property is surround by other commercial agriculture business and fits in with the designated zoning of the area.

I strongly urge the County to issue a permit for this project.

Sincerely,

Jason Kennedy

Sent from Mail for Windows 10

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Michael Wright <mwright@tworockventures.com>

Sent: April 02, 2019 11:14 AM

To: Crystal Acker Cc: Sam Magruder

Subject: Cannabis Permit UPC17-0020

Hello Crystal,

This email is submitted in support of the pending cannabis permit UPC17-0020 for 334 Purvine Road. There has been a mountain of mis-information spread by opposition groups that has been proven wrong time and time again on this project and I know this because my project has been lied about by many of the same people. As members of the community, we have to finally realize that the public has voted in cannabis and the Supervisors have implemented an ordinance that this group is following, so the project should be approved on it's own merits, not by the irrationality of a minority opposition.

The applicant has provided the necessary documents to prove that the proposed project satisfies all of the requirements of the cannabis land use ordinance and should be approved. The proposed project is located in Zone 2 water area and is on a larger parcel, a good distance from surrounding parcels. Additionally, the property is surround by other commercial agriculture business, fits in with the designated zoning of the area, and will not impact traffic in the area. In fact, we are neighbors to this project and we support an approval on all fronts.

Ultimately, the land use ordinance has set the guidelines for cannabis permits, and this project has proven to satisfy all of those requirements. Regardless of opposition, rules have been established and the applicant has provided ample evidence that this project qualifies for a cannabis cultivation permit.

Therefore, I strongly urge the County to issue a permit for this project.

Sincerely, Michael Wright

Michael W. Wright

President

TRV Corp.
6095 Bodega Avenue
Petaluma, CA 94952
415-300-0295
mwright@tworockventures.com

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From: David Brown dbrown@newgrowthinsurance.com

Sent: March 27, 2019 11:53 AM

To: Crystal Acker

Subject: Subject line: Comments for UPC17-0020, 334 Purvine Rd.

Dear Ms. Acker,

I work in Sonoma County and I am familiar with the proposed project at 334 Purvine Rd. I am writing to voice my support for this project as it meets and exceeds every aspect of the Sonoma County cannabis ordnance.

This property is located in Zone 2 water area and is a larger parcel not connected to a neighborhood. The property is surround by other commercial agriculture business and fits in with the designated zoning of the area.

I strongly urge the County to issue a permit for this project.

Regards,

David Brown

Account Manager

New Growth Insurance

2 Padre Parkway, Rohnert Park, CA 94928

Office 707-827-7999 Fax 707-471-4147

Cell 707-827-7999

www.newgrowthinsurance.com

New Grawth FINSURANCE

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Julie Mercer-Ingram <julie@kindlaw.net>

Sent: March 27, 2019 11:42 AM

To: Crystal Acker

Subject: Letter of Support for UPC17-0020, 334 Purvine Road.

Hello Crystal,

This email is submitted in support of the pending cannabis permit UPC17-0020 for 334 Purvine Road. The applicant has provided the necessary documents to prove that the proposed project satisfies all of the requirements of the cannabis land use ordinance and should be approved. The proposed project is located in Zone 2 water availability and is on a larger parcel, a good distance from surrounding parcels. Additionally, the property is surround by other commercial agriculture business, fits in with the designated zoning of the area, and will not impact traffic in the area.

Ultimately, the land use ordinance has set the guidelines for cannabis permits, and this project has proven to satisfy all of those requirements. Regardless of opposition, rules have been established and the applicant has provided ample evidence that this project qualifies for a cannabis cultivation permit.

Therefore, I strongly urge the County to issue a permit for this project.

Sincerely,

Julie

--

Julie Mercer Ingram, Managing Attorney Kind Law 1011 2nd Street, #202 Santa Rosa, CA 95404

Phone: (707) 757-9445

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THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

EXHIBIT C

Public Comments Early Comments

From: Lois Givens <loisgiv@gmail.com>

Sent: March 05, 2018 3:28 PM

To: Crystal Acker

Subject: Fwd: Re: Feb 21st Meeting Follow Up

No way should cannabis be grown in our area. They should grow in warehouses somewhere. It will affect the water supply which is already a problem. It will create crime and is not going to stop illegal grow. Has there ever been testing to see if the aroma could affect some one later on in life? If it is to be grown near schools that is something to be looked into. Also what about wildlife, will they be affected?

My parents bought this property in 1955 and I have been living here for the past 14 years and concerned about the changes that could take place if pot is to be grown here.

Thanks Lois Givens

----- Forwarded message -----

From: "Lois Givens" < loisgiv@gmail.com>

Date: Mar 5, 2018 1:02 PM

Subject: Fwd: Re: Feb 21st Meeting Follow Up

To: < <u>DavidRabbitt@sonomacounty.org</u>>

Cc:

----- Forwarded message -----

From: "Lois Givens" < loisgiv@gmail.com>

Date: Mar 5, 2018 11:54 AM

Subject: Re: Feb 21st Meeting Follow Up

To: "No Pot On Purvine" <nopotonpurvine@gmail.com>

Cc:

No way should cannabis be grown in our area. They should grow in warehouses somewhere. It will affect the water supply which is already a problem. Will create crime and is not going to stop illegal grow. Has there ever been testing to see if the aroma could affect someone later on in life? If it is to be grown near schools that is something that should be checked in to. Also, what about wildlife what affect will it have on them?

On Feb 27, 2018 6:59 PM, "No Pot On Purvine" <<u>nopotonpurvine@gmail.com</u>> wrote: Hello neighbors!

Thank you for attending the community meeting last week! **The turnout was astonishing--**300+ community members attended, illustrating how passionate we are about preserving and protecting our neighborhoods. Even though our name and signage read "No Pot On Purvine," our group is dedicated to working together with the broader community and surrounding areas on combating multiple commercial application sites, and to working on the larger issue of commercial cannabis in our county. If you would like to get more involved in this movement and have not already subscribed through our website, please let us know by calling us at 707-559-8563, responding to this email, or signing up here. **Please keep reading for actions items and steps to take moving forward:**

This meeting was just the beginning. The goal of the meeting was for neighbors to walk away with a sense of urgency in expressing their concerns about commercial cannabis projects coming into our area and changing the landscape, sanctity, and social fabric of our community. David

Rabbitt, our District 2 Supervisor, essentially provided us all with a roadmap of how the community can challenge these individual projects while we work on collecting data which will show why our area and others cannot support this commercial industry.

Per David, the Zoning Code's Use Permit Approval Findings language specifically states:

"The design location size and operating characteristics of the use is considered compatible with the existing and future land uses within the vicinity. The use would not be detrimental to the health, safety, peace, comfort and general welfare of persons residing or working in the neighborhood of such use, nor be detrimental or injurious to property and improvements in the neighborhood or the general welfare of the area."

NOW is the time to take action. Here is how:

1.) Write letters to the specific county project planners for these applications and voice your opinions. Attached to the end of this email is a **template letter**, which you can use and edit at your discretion. *Remember that numbers matter*. Every member of your family can write a letter and send it via email to the county to increase the number of letters in applications' files. This should increase the level of scrutiny given to the application, and will certainly assist in challenging them. Please write letters (even if they are identical in content) for applications throughout the Middle Two Rock, Bloomfield, and Penngrove areas. If the grow site by your home is not listed below, email us and we will connect you with the information and a contact!

APPLICATIONS BY ADDRESS:

334 Purvine Road

Project Planner: Crystal Acker

Email: <u>Crystal.Acker@sonoma-county.org</u>, <u>Tennis.wick@sonoma-county.org</u>

Application No.: UPC 17-0020

6095 Bodega Avenue.

Project Planner: Scott Orr

Email: Scott.Orr@sonoma-county.org, Tennis.wick@sonoma-county.org

Application No.: UPC17-0018

*3215 Middle Two Rock Road

Project Planner: Crystal Acker

Email: Crystal.Acker@sonoma-county.org, Tennis.wick@sonoma-county.org

Application No.: UPC17-0095

*Note: as many neighbors have already observed, this project is in the midst of constructing their outdoor cannabis cultivation area and is currently growing cannabis on-site. They are "grandfathered in" and are operating under the County's Penalty Relief Program. Your letters should address this fact, and you may also want to cc: Tennis Wick (the head of Permit Sonoma) in your email. This is particularly concerning as there is no public hearing period for neighbors to vocalize their concerns while they operate without a conditional-use permit.

For the following applications please email your concerns and letters to:

Tennis.wick@sonoma-county.org

1321 Spring Hill Rd-Petaluma

Application No.: UPC17-0101

7610 Valley Ford Rd, Petaluma

Application No.:UPC17-0087

2040 Fallon Rd, PetalumaApplication No: UPC17-0024

4222 Browns Ln, Petaluma

Application No: UPC17-0031

5000 Lakeville Hwy, Petaluma

Application No: UPC17-0023

2275 Roberts Rd. Penngrove

Application No: UPC17-0090

2.) Write letters to or call supervisors and their district directors expressing your concerns about commercial cannabis policies in Sonoma County. Many who have done so already have received a response prompting them to identify where in Sonoma County these grows should be placed instead--anticipate this response, and remember that the issue at hand is the inappropriate placement of current applications.

Here is the list of Supervisors and their emails:

Susan Gorin

District 1 Supervisor
Medical Marijuana Ad Hoc Committee
Susan.Gorin@sonoma-county.org

Pat Gilardi

District Director to Susan Gorin Pat.Gilardi@sonoma-county.org

David Rabbitt

District 2 Supervisor

<u>David.Rabbitt@sonoma-county.org</u>

Andrea Krout

District Director to David Rabbitt Andrea.Krout@sonoma-county.org

Shirlee Zane

District 3 Supervisor

Shirlee.Zane@sonoma-county.org

Michelle Whitman

District Director to Shirlee Zane

Michelle.Whitman@sonoma-county.org

James Gore

District 4 Supervisor

James.Gore@sonoma-county.org

Jenny Chamberlain

District Director to James Gore jenny.chamberlain@sonoma-county.org

Lynda Hopkins

District 5 Supervisor Medical Marijuana Ad Hoc Committee Lynda.Hopkins@sonoma-county.org

Susan Upchurch

District Director to Lynda Hopkins Susan.Upchurch@sonoma-county.org

For those of you who would like a template letter to send to your supervisor, please email our group directly.

Sincerely,

The No Pot On Purvine Team

If you would like to continue to receive emails and updates, please take a moment subscribe to our email list on nopotonpurvine.com

--

Please take time to visit our website <u>nopotonpurvine.com</u>

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

RECEIVED

MAR 0 9 2018

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT COUNTY OF SONOMA



ON MAR 2013 PHIST

SAN PRINCISCO CA 940

A CONTRACTOR OF THE PARTY OF TH

[MELINDA WITT]

123 Example Road Petaluma, CA [707-494-1987] [MELINDA7555@MSN.COM]

February _28____, 2018

Project Planner Name

Project Planner Permit Resource & Management Department 2550 Ventura Avenue, Santa Rosa

I am writing to you in response to file [ALL UPC Number]: The proposed permit for cannabis cultivation at [ALL application address]. THESE POT PLANTS DO NOT BELONG IN SONOMA COUNTY TWO ROCK AREA GROUND WATER HAS DETERIATED OVER THE YEARS. WHAT RIGHT DO THESE PEOPLE HAVE COMING IN AND RAPING ARE WATER SUPPLY!!!!!!! THE STATE OF CALIFORNIA REQUIRES LAND OWNERS WITH RESERVOIRS TO FOLLOW STRICT LICENSEE RULES AND REPORTING EACH YEAR. IT HAS GOTTEN WORSE THE LAST FEW YEARS RANCHERS HAVE WORKED THERE LAND IN TWO ROCK AND OTHER ARES FOR GENERATIONS WE CHERISH AND USE ARE WATER WISELY. WE AND I AM SURE I CAN SPEAK FOR MANY DO NOT NEED POT TAKING ARE WATER, THEY CAN GO BUY A BARGE FLOAT OUT OF SMELL RANGE AND FILTER SEA WATER FOR THERE POT.

As a neighbor to this property, I am greatly concerned about this application and the potential impacts of yet another large scale and commercial cannabis operation on our countryside and greater [Middle Two Rock/Bloomfield/Penngrove/Lakeville] community. I am also disappointed that [I/my other neighbors] have not already been notified about this application by the County's Permit & Resource Management Department. In light of this fact, I am requesting that you notify me at [MELINDA7555@MSN.COM] of any future developments or changes to this application, and of any opportunities to publicly air my concerns.

Specifically, I reside at [ADDRESSES SHOULD NOT MATTER] and own DOESNT MATTER ___ acres across approximately [SHOULDNT MATTER distance] from the application site. I have lived in this area for the last _57 AND AGE SHOULD NOT MATTER___ years. Over the years, my neighbors have been denied expansion of their business by the County on the premise of water availability and inadequate utility services. As a property owner in close proximity to this proposed cannabis business, which is a high-water crop, I have many concerns about this industry's impact on our area's water quality and availability. The safety of our community is of utmost importance, and the county seems ill-prepared to adequately notify, inform and protect the surrounding communities, and to mitigate our concerns. Furthermore, I believe that the application for this proposed commercial cannabis grow will undeniably contribute to increased theft, odor and traffic, and will have permanent/irreversible effects on the cultural and natural landscape of the area.

Please know that I have already contacted my supervisor, RABBIT	and will be
meeting with him/her to express my concerns about this permit further.	

Sincerely,

[MELINDA WITT]



December 21, 2017

Crystal Acker
Project Planner
County of Sonoma
Permit and Resource Management Department
2550 Venture Avenue
Santa Rosa, CA 95403-2829

Re: UPC17-0020
Petaluma Hills Farm, LLC Cannabis Permit Application
334 Purvine Road, Petaluma

Dear Crystal:

I am writing on behalf of No Pot on Purvine, a group of more than 40 Sonoma County residents opposed to the issuance of a use permit to Petaluma Hills Farm ("PHF") for a large commercial grow operation in the Purvine Road/Two Rock neighborhood.

To issue a permit, decision-makers must find that the proposed use is not detrimental to the health, safety, peace, comfort or welfare of the neighborhood or the general public (SCC 26-92-070(a)). The standard for issuance of a commercial cannabis permit is more specific, providing that the proposed grow operation:

shall not create a public nuisance or adversely affect the health or safety of the nearby residents or businesses by creating dust, light, glare, heat, noise, noxious gasses, odors, smoke, traffic, vibration, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, runoff or wastes (SCC 26-88-250(f)).

The PHF project must also be reviewed under CEQA, which requires that potential environmental impacts, including cumulative and reasonably foreseeable impacts, be disclosed to the public, evaluated and, if possible, mitigated.

Crystal Acker December 21, 2017 Page Two

The PHF application in its current form does not contain sufficient information to allow for meaningful review of the project by County staff or the public. No Pot on Purvine strongly encourages you to request more information from the applicant in several key areas.

1. <u>Project Description</u>.

A. <u>Ambiguity</u>.

The project description is vague and incomplete. The application does not contain a clear or comprehensive description of the proposed production cycle, covering cultivation, processing, storage and shipment.

- What is the timing of the production cycle? What inputs are required, in what quantities, and how will they be transported, stockpiled and replenished?
- What processing techniques will be employed? Do they require any specialized equipment, chemicals, or additives? What waste will be produced?
- What will be the final product of the grow operation? There are many different types of cannabis end products that require different degrees of processing. Will there be any further processing or alteration of the product after it leaves the project site?
- Where and how will the final product be packaged? What type of packaging material will be utilized, and how often will it be replenished?
- How will the product be distributed and sold? How many pick ups and deliveries will be required, in what size trucks, how far will those trucks travel, and during what times of year? What security will be provided to the trucks?

B. <u>Inconsistency</u>.

The project description is internally inconsistent. For example, the traffic engineer's analysis assumes that the operation will employ 5 people, while the applicant says it will employ at least 15 people during the operation's first year. PHF proposes to construct and maintain 20,000 gallons of on-site water storage according to its use permit application, but will have 30,000 gallons of on-site water storage according to its Fire Plan.

Crystal Acker December 21, 2017 Page Three

C. <u>Instability</u>.

The project description is still not static. The applicant recently increased the size of the proposed outdoor grow by 30%, and added a request for a specialty indoor facility equal to another 15% of area under cultivation. These are significant changes to be made midstream, and raise questions about the traffic, water, and other representations in the application which are based on the smaller, pre-revision proposal.

D. <u>Expansion</u>.

Finally, the application anticipates that the project will be expanded in the foreseeable future, yet fails to quantify or describe this expansion in any way. For example, PHF clearly envisions that its operation will continue to grow after its first year, requiring the company to increase its initial staff of at least 15. The company's projections of reasonably foreseeable growth must be analyzed for CEQA purposes.

A sound project description is essential for meaningful environmental review. (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d, 185, 192.) The description must be accurate, stable, consistent and complete, and include activity that may foreseeably result from project approval. A proper description is also crucial in order for the public to play its CEQA role, and for County officials to effectively evaluate the impact of the project on the welfare the community.

2. <u>Priority Status</u>.

PHF claims a right to have its application processed in priority fashion on grounds that Sam Magruder meets the Sonoma County residency requirements specified in the Cannabis Ordinance (No. 6189) ("Ordinance") and that PHF's application includes a local preference hiring plan (SCC 26-88-250(h)(4)).

By letter dated November 7, 2017 addressed to PRMD Director Tennis Wick, I outlined why Magruder did not qualify as a Sonoma County resident prior to the January 1, 2016 cut-off date. Staff's response, I am told, has been to disregard my letter on grounds that applications will be processed in the order in which they are deemed complete, regardless of claims for priority status.

I do not believe that is what the Supervisors intended when they granted locals the right to obtain cannabis permits ahead of non-residents. Staff may not disregard the priority issue, simply writing those provisions out of the Ordinance. If I have misunderstood staff's position, please clarify it for me.

Crystal Acker December 21, 2017 Page Four

No less concerning is staff's failure to respond to the misleading nature of PHF's representations. As described in my November 7 letter, Magruder's assertion that he was a Sonoma County resident prior to January 1, 2016 is contradicted by documents filed with the State of California, identifying Magruder as a resident of San Francisco. If some of the representations in the PHF application are false, how can the County or the public trust any of them? PHF should substantiate its claim to priority treatment or, as required by the Ordinance ((SCC 26-88-250(h)(3)), the County should reject its application.

PHF's application should also be denied priority status because it does not include a local preference hiring plan (SCC 26-88-250(h)(4)). The gist of the "plan" described in the application consists of a statement by PHF that it will "build a robust hiring program to meet and exceed Sonoma's requirements for local hiring." That is not a plan; it is an empty promise. Surely the Supervisors intended that more specific commitments to local hiring be made before an applicant qualifies for priority.

3. Applicants' Background.

The Ordinance requires applicants to undergo background checks by the California Department of Justice (SCC 26-88-250(h)(2)). The County must deny permits to those with felony convictions as specified in Penal Code \S 667.5 and Penal Code \S 1192.7(c), which includes only the most violent and egregious crimes, such as murder, kidnapping and rape. PHF represents that its principals have no such convictions.

Staff should not stop there, however. The lack of a violent felony record should not qualify someone to receive a cannabis permit in Sonoma County. It is inconceivable that the Supervisors would set the bar so low. No Pot on Purvine strongly encourages staff to look more closely at the PHF principals, which is easy to do using any one of the many available databases.

A. ABC Violations.

A cursory search reveals two issues which merit further attention. In 2006, Sam Magruder, a PHF principal, registered a California limited liability company called Magruder & Crum LLC (No. 200615310113), of which he was a member. The company operated a bar in Eureka, California under a Type 48 license from the California Alcoholic Beverage Control Board ("ABC").

Crystal Acker December 21, 2017 Page Five

In 2007, the ABC suspended the license of Magruder & Crum LLC twice. The first suspension (Case No. 07065304) was for 15 days, and was accompanied by a \$3,000 fine, for serving alcohol to minors. The second suspension (Case No. 07065740) was for serving intoxicated persons and allowing minors into the bar, and was punished by a 35-day suspension.

Curiously, ABC disciplinary records do not list Magruder as an LLC member, although Magruder identifies himself as such in a June 2006 filing with the California Secretary of State. Assuming he was a member of the company, California law required Magruder to identify himself in the company's application for an ABC license, which is signed under penalty of perjury. Failure to do so, if that is indeed what happened, raises serious questions.

The parallels between an alcoholic beverage license and a cannabis license are obvious. It is incumbent on the applicant to confirm whether this interpretation of ABC records is correct and, if so, to explain the suspension of Magruder & Crum's ABC license.

B. <u>SEC Violations</u>.

The application identifies Mike Harden of San Francisco as PHF's CEO. Harden, a licensed stockbroker, identifies himself as a co-founder and senior partner in an investment advisory firm called Artis. In 2008, an Artis employee, Michael Teeple, who was recruited and supervised by Harden, obtained insider information about a tech company of interest to Artis and its clients. He shared that information with Harden, who failed to ask any questions or report the matter to Artis' compliance officer. Instead, Artis executed a series of trades in the tech company's stock, generating profits and avoiding losses of some \$25 million dollars. Teeple received a discretionary \$1 million bonus at the end of the year.

The SEC charged Harden with violations of the securities laws (File No. 3-17624). In October 2016, Harden settled the charges in exchange for a 12-month suspension of his securities license and payment of a \$130,000 fine. Artis was required to disgorge its illegal profits and pay penalties and interest totaling \$8.9 million. As part of the settlement, Harden admitted that the SEC's charges were true.

This conduct by the applicant's Chief Executive Officer is deeply disturbing. If the CEO is capable of violating federal securities law, why would the County expect compliance with state and local cannabis law? These issues need to be aired fully before officials confer on PHF the privilege of growing and selling marijuana in Sonoma County.

Crystal Acker December 21, 2017 Page Six

4. Traffic.

The traffic analysis submitted in support of the PHF application lacks credibility. It erroneously assumes that the grow operation will have 5 employees. It then uses the ITE trip generation rate for light industrial uses (3.02) to conclude that the project will generate about 15 trips per day, including deliveries, visitors and other business traffic. The low trip generation rate "appears reasonable," according to the traffic engineer, because some employees would carpool to work. The analysis uses this sleight of hand to characterize project traffic impacts as "imperceptible."

The applicant says it will employ not 5 but 15 employees, at least, by the end of its first year. It also indicates that its workforce will increase after year one to accommodate projected growth. Changing this single variable – the number of employees -- triples the impact projected by the traffic engineer.

The use of the light industrial trip generation rate is of doubtful validity. In preparing the Negative Declaration for the Cannabis Ordinance, County staff used a trip generation rate of 4, resulting in 60 trips per day for a workforce of 15. Staff noted that a recent cannabis cultivation application in the City of Santa Rosa was projected to have 12 to 15 employees for a 10,000-square foot indoor operation. If that ratio holds true, the PHF operation will employ far more than 15 people.

The point here is that we simply do not know. The only available traffic data in the cannabis field is for dispensaries, which generate 5 times more traffic than a pharmacy and 10 times more than a typical retail store. In light of such numbers, the County must err on the side of caution.

Not only does it fail to provide basic data, but the PHF traffic analysis fails to consider (i) traffic impacts during the initial construction phase, (ii) changed traffic patterns resulting from the project's 24/7 operation, and (iii) fluctuating traffic flows likely to peak during harvest. Traffic impacts will be magnified because the neighborhood is extremely rural. The County must know the relevant facts before deciding whether to allow a commercial cannabis venture to operate there.

5. Fire.

The applicant's Fire Plan is even less impressive than its traffic study. It may be summarized as follows: 1. There is a danger of wildfires in Sonoma County. 2. The project area

¹ http://www.mikeontraffic.com/trip-generation-data-marijuana-dispensaries.

Crystal Acker December 21, 2017 Page Seven

has experienced fast-moving vegetation fires in the past. 3. A well-organized fire suppression response is the most significant factor in reducing loss of life and property. 4. The project area is serviced by volunteer rather than professional fire companies. 5. The number of volunteer firefighters has been dropping in recent years. 6. Funding for fire protection districts is declining. 7. The project will utilize goats and sheep, as necessary, to keep fuel loads under control.

To make it appear more substantial, the Plan attaches numerous schematics of turnouts, water tanks, hydrants and the like copied directly from the Sonoma County Fire Standards. It is unclear whether, when, where and how any of these standards will be implemented at the project location.

The PHF Fire Plan does not even mention the many well-known fire hazards unique to cannabis cultivation. They include hot, dangling lights, many of which are on 24 hours per day; high electrical loads necessitated by high-intensity lights, air conditioning, fans and filtration systems; locked facilities to protect the high-value commodity inside, which can obstruct ingress and egress; hazardous fumigation measures and materials; and CO2-enriched environments to increase plant yields. Processing operations create even greater hazards by using flammable solvents, such as butane and propane.

In light of recent history, staff should demand a more thorough analysis of fire risks and safety measures related to this project.

6. Water.

A. Water Demand.

It is unclear from the application how much water the project will use. The applicant's usage analysis shows, without substantiation, that the entire operation will use a little over two acre-feet of water per year ("AFY"). Staff used very different figures in preparing the Negative Declaration for the Ordinance, figures that suggest the project will use from 4.3 to 26.3 AFY. The applicant's figures lack credibility, while the staff's figures present too great a range to evaluate water use meaningfully.

B. <u>Water Supply</u>.

Also unclear is whether the project has an adequate water supply. The application identifies the site as lying within Groundwater Availability Zone 2 (major natural recharge). The County's ActiveMap database shows multiple adjoining parcels as Zone 4 (highly variable or low water yield). PRMD's Groundwater Availability Map locates the site on the border

Crystal Acker December 21, 2017 Page Eight

between Zone 4 and Zone 3 (marginal groundwater availability). The public is thus left to guess as to the project's baseline groundwater conditions.

C. Groundwater Zones.

The zone classification system is inadequate for a CEQA evaluation of the project. Zones are based on information about the region's geology, not groundwater measurements. The geological data dates from 1980, which many would call out of date. Most importantly, the zone classification system does not provide any parcel-specific information. The PRMD Groundwater Availability Map explicitly warns that it is not suitable for drawing parcel-specific conclusions.

Under the General Plan, an applicant for a discretionary permit must prove that sufficient groundwater exists on site to support its proposed use and the cumulative projected uses in the area. The PHF application contains no proof. It contains no hard data concerning water supply or demand. A well-interference study was not done, though nearby residents complain about their wells running dry. Staff should require the applicant to provide credible, parcel-specific water data.

7. <u>Security</u>.

The applicant proposes to install motion-detection security cameras, 8-foot high fences topped with barbed wire, and a guard shack. This describes a penitentiary, not a farm. Such imposing security is unheard of in this quiet neighborhood, and understandably puts residents on edge.

Because security issues are so prominent, it is important for neighbors to review the applicant's security proposal. It is inconceivable that the County would make a decision that so directly bears on public safety based on a secret security plan. I respectfully disagree that the plan is exempt from public scrutiny. Please consider this letter a request under the Public Records Act to review the plan.

8. Conclusion

My clients are deeply concerned that staff has deemed this application complete, when it contains such a dearth of information. This letter barely scratches the surface of the inadequacies. Additional information is needed concerning odor impacts and odor control, lighting, aesthetics, pesticide handling and use, wastewater disposal, and storm water runoff, including the risk that the aquifer may be contaminated through "at least" two hand-dug wells on the property identified in the applicant's well report.

Crystal Acker December 21, 2017 Page Nine

The procedure for processing cannabis permits is still a work in progress. The Purvine Road neighbors do not wish to be a test case. This application for a commercial grow operation in a tranquil, rural neighborhood demands much more scrutiny than it has received to date. It is incumbent on the applicant to provide the facts necessary to evaluate its proposal. If those facts are not forthcoming, it is incumbent on staff to demand them.

Sincerely

Kevin P. Block

From: Mike Loades <mikeloades2@aol.com>

Sent: November 16, 2017 5:19 PM

To: Crystal Acker

Subject: Water supply on Purvine

Crystal Acker

Project Planner
Permit Resource & Management Department
2550 Ventura Avenue, Santa Rosa

Dear Ms. Acker,

I am writing to you in response to file UPC17-00200: The proposed Permit for cannabis cultivation at 334 Purvine Rd. in Petaluma.

As a frequent visitor to an equestrian center close to this property in this community, I am greatly concerned about this application and the potential impacts of this large-scale operation on our countryside and greater community. I am also disappointed that we have not already been notified about this application by the County's Permit & Resource Management Department. In light of this fact, I am requesting that you notify me at mixeloades2@aol.com of any future developments or changes to this application, and of any opportunities to publicly air my concerns.

As a frequent visitor to a property in close proximity to this proposed cannabis business, which is <u>a high-water crop</u>. I have serious concerns about this industry's impact on our area's <u>water quality and availability</u>.

Please know that I will be contacting my supervisor, David Rabbit, to express my concerns about this permit further.

Sincerely,

Mike Loades

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

Cameron Momtaz 3539 Skillman Lane Petaluma, California, 94952

November 16, 2017

Crystal Acker, M.S
Planner III
County of Sonoma
Planning division | Project Review
2550 Ventura Avenue, Santa Rosa, CA 95403

Dear Crystal Acker,

I am writing in opposition to the granting of a permit for commercial cannabis operations at the Petaluma Hills Farms.

Petaluma, through its development program, has been a respected pioneer in establishing the legal precedent that community members can have a say in how their community develops. We owe much of the high quality of life here in Petaluma to the visionary planners of the past who protected our city from unrestrained commercial development.

I acknowledge that a community's opposition must be balanced against the interests of the landowner. However, I feel that in this case the overwhelming neighborhood opposition should be weighted more heavily than the commercial interests of a new operation that is entirely out of character for our community.

For this reason, I respectfully ask that the permit be denied.

Montaz

Sincerely,

Cameron Momtaz

3539 Skillman Lane, Petaluma, California

From: schroederfamily@yahoo.com
Sent: November 16, 2017 6:58 AM

To: Crystal Acker

Subject: 334 Purvine Road, Petaluma

Crystal Acker

Project Planner
Permit Resource & Management Department

2550 Ventura Avenue, Santa Rosa

Dear Ms. Acker,

We are writing to you in response to file UPC17-00200: The proposed Permit for cannabis cultivation at 334 Purvine Rd. in Petaluma.

As owners of horses at an equestrian center close to this property in this community, we are greatly concerned about this application and the potential impacts of this large-scale operation on our countryside and greater community. We are also disappointed that we have not already been notified about this application by the County's Permit & Resource Management Department. In light of this fact, we are requesting that you notify us at schroederfamily@yahoo.com of any future developments or changes to this application, and of any opportunities to publicly air our concerns.

Also, as a local resident, this proposed cannabis business, which is a high-water crop, raises many concerns about this industry's impact on our area's water quality, availability, safety and traffic. Furthermore, we believe that the proposed plan would also contribute to increased theft, odor, and would have permanent effects on the cultural and natural landscape of the area.

Please know that we will be contacting our supervisor, David Rabbit, to express our concerns about this permit further.

Sincerely,

Elisabeth and Carsten Schroeder 520 Fairview Ct 94952 Petaluma

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: vickie shular <winbyaheadbob@pacbell.net>

Sent: November 15, 2017 9:07 AM

To: Crystal Acker

Subject: NO POT ON PURVINE!!!!

Crystal Acker

Project Planner
Permit Resource & Management Department
2550 Ventura Avenue, Santa Rosa

Dear Ms. Acker,

We are writing to you in response to file UPC17-00200: The proposed Permit for cannabis cultivation at <u>334</u> Purvine Rd. in Petaluma.

As frequent visitors to an equestrian center close to the property in this community, we are greatly concerned about this application and the potential impacts of this large-scale operation on our countryside and greater community. We are also disappointed that we have not already been notified about this application by the County's Permit & Resource Management Department. In light of this fact, We are requesting that you notify us at: windyaheadbob@pacbell.net (for Vickie)

and <u>calliepowerx@gmail.com</u> (for Caroline)

of any future developments or changes to this application, and of any opportunities to publicly air our concerns.

As frequent visitors to this property in close proximity to this proposed cannabis business, which is a high-water crop, We have many concerns about this industry's impact on our area's water quality, availability, safety and traffic. Furthermore, We believe that the proposed plan would also contribute to increased theft, odor, and would have permanent effects on the cultural and natural landscape of the area.

Please know that we will be contacting our supervisor, David Rabbit, to express our concerns about this permit further.

Sincerely,

Vickie Shular

Caroline Kindrish

Sent from my iPhone

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Alice Chan <alicechan555@yahoo.com>

Sent: November 07, 2017 10:34 PM

To: Crystal Acker

Subject: No pot on Purvine Rd, Petaluma

Crystal Acker Project Planner Permit Resource & Management Department 2550 Ventura Avenue, Santa Rosa

Dear Ms. Acker,

I am writing to you in response to file UPC17-00200: The proposed Permit for cannabis cultivation at 334 Purvine Rd. in Petaluma.

As a frequent visitor to an equestrian center close to this property in this community, I am greatly concerned about this application and the potential impacts of this large-scale operation on our countryside and greater community. I am also disappointed that we have not already been notified about this application by the County's Permit & Resource Management Department. In light of this fact, I am requesting that you notify me at **alicechan555@yahoo.com** of any future developments or changes to this application, and of any opportunities to publicly air my concerns.

As a frequent visitor to a property in close proximity to this proposed cannabis business, which is a high-water crop, I have many concerns about this industry's impact on our area's water quality, availability, safety and traffic. Furthermore, I /we believe that the proposed plan would also contribute to increased theft, odor, and would have permanent effects on the cultural and natural landscape of the area.

Please know that I will be contacting my supervisor, David Rabbit, to express my concerns about this permit further.

Sincerely,

Alice Chan

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

From: Dan Hale <Dan@fcccpas.com>
Sent: November 07, 2017 11:33 AM

To: Crystal Acker

Subject: Objection to permit for cannabis cultivation at 334 Purvine Rd. in Petaluma

Crystal,

A property owner near the proposed grow site has brought to my attention the proposed permit for cannabis cultivation at 334 Purvine Rd. in Petaluma. I have to <u>state I object to a permit for this type of farming as these</u> operations are always targets for criminals with and without weapons.

I am resident of Petaluma, but not a landowner in the proposed permit area. The reason I have a concern is I use the service of two horse barns for my daughter to learn and practice horseback riding for competition. I use two trainers in the area, Nathalie Guion (3641 Middle Two Rock) and Renee Ronshausen (3915 Middle Two Rock), for the last seven years. These barns are a gathering point for many children as well as my own and I know they are safe all day on these properties. I would have to re-think the risks if a marijuana farm was permitted nearby. These properties are very close to the proposed permit site and any criminal activity very likely would impact the property operations. As a parent, I have enough concerns. I don't need to wonder if a criminal will trespass on these properties to access or escape; if a gun fire will result in a stray bullet onto the properties, if a gunshot will unnecessarily spook a horse resulting in a rider injury. The ingress and egress on the roadways are limited to two options. I don't need to worry if a criminal is recklessly driving on the same roads as my children. These concerns may seem to forecast problems that may not occur, but criminals always find a way. These kids – they range from 6 to 18 years old. The proposed permit site is not congruent to the uses by the community and minor children.

Thank you for your consideration.

Daniel Hale

1 Sheffield Pl

Petaluma, CA 94954

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.



November 7, 2017

Tennis Wick, Director Permit and Resource Management Department County of Sonoma 2550 Venture Avenue Santa Rosa, CA 95403-2829

Re: UPC17-0020
Petaluma Hills Farm, LLC
Use Permit Application for Cannabis Cultivation
334 Purvine Road, Petaluma

Dear Mr. Wick:

I represent a group of neighbors concerned about the application by Petaluma Hills Farm, LLC ("PHF") for a commercial cannabis cultivation permit at 334 Purvine Road. The application identifies PHF's principals as Sam Magruder (COO), Gian-Paolo Veronese (CFO) and Mike Harden (CEO), all of whom are listed as San Francisco residents (Exhibit A). PHF's articles of organization also designate San Francisco as its principal place of business (Exhibit B).

PHF requests priority processing status based on section 26-88-250(h)(4) of the Sonoma County Code, which grants priority to applicants who (a) provide a local preference hiring plan and (b) whose owner or operator has been either (i) an existing cannabis operator or (ii) a resident of Sonoma County prior to January 1, 2016.

The application neither claims that Magruder, Veronese or Harden were cannabis operators in the County before January 1, 2016, nor does it assert that Harden was ever a County resident. The application does suggest that Veronese became a resident of Glen Ellen in July 2016, but that is well past the priority cut-off date.

PHF's request for priority rests solely on the claim that Magruder was a Sonoma County resident before January 1, 2016. It represents that Magruder owned property at 8800 Cider Springs Road in Sebastopol from April 2014 to June 2016. Owning property, however, does not make someone a resident; a person may own property in many locations but may only have one lawful residence. (Gov't Code § 244(b).)

Tennis Wick November 7, 2017 Page Two

Nowhere does the PHF application say that Magruder *resided* at his Sebastopol property. If anything, it suggests the opposite. The application states only that Magruder was "present" in the County before January 1, 2016 "to the best of [his] abilities," but that his "occupancy term" was "disrupted" when he determined that the Sebastopol property was not suitable for cannabis cultivation.

Residence means a place where one lives on a permanent as opposed to a transitory basis; a resident is someone who lives there and plans to return. (Gov't Code § 244(a).) Residence is established by "the union of act and intent," i.e., by physically moving to a location with the intention of living there. (Gov't Code § 244(f).) Self-serving declarations of intent carry little weight. Intent must be established based on objective evidence, such as tax records, voter registration, car registration, club memberships, bank accounts, credit card statements, cell phone bills, and bills for medical and dental treatment. (*Noble v. Franchise Tax Board* (2004) 118 Cal.App.4th 560, 567-569.)

Sonoma County's Priority Processing Application (Form PJR-001) requests such evidence, but none is provided by PHF. A deed showing Magruder's purchase of the Sebastopol property is supposedly included, but the only deed attached to the application is for an unrelated transaction. No matter, because even the correct deed would be of little use, since mere ownership of the Sebastopol property does not make Magruder a Sonoma County resident.

The application also claims to include "occupancy verifications" for Magruder signed by Gian-Paolo Veronese and Leah Kahn. It is not clear what an "occupancy verification" is, or whether verifications by Magruder's friends, partners and co-applicants should be given any weight. Those questions are moot, however, given that no verifications are attached to the application.

The application does include a June 2016 settlement statement showing Magruder's sale of the Sebastopol property. The statement does not show when Magruder bought the property, or whether he ever lived there, and is therefore irrelevant. Again, property ownership does not establish residence.

Readily available evidence in the public record indicates that Magruder did not live in Sebastopol and was not a Sonoma County resident. In 2015, for example, he registered Sustain Farms and Farming Investment Group, Inc., two cannabis-related companies head-quartered in San Francisco. In 2016, while he still owned the Sebastopol property, Magruder identified himself as the San Francisco-based CEO of those companies in filings with the Secretary of State (Exhibits C, D). Multiple online search directories and databases show Magruder's addresses at various times over the past ten years as Page Street, Scott Street, Cesar Chavez Street and Geary Boulevard in San Francisco.

Tennis Wick November 7, 2017 Page Three

In my opinion, PHF is trying to gain an unfair advantage over local applicants by claiming residency for its COO based on incomplete and misleading evidence. That alone is reason to deny its permit application under County Code section 26-88-250(h)(3), which calls for the rejection of applications containing misleading information.

PHF's request for priority must be decided now, administratively, before its application is processed further. If resolution of the priority issue is deferred until the use permit hearing, the application will already have received *de facto* priority treatment, however undeserved.

I therefore request that you suspend processing the PHF application, consider the applicant's request for priority status, and reject the entire application on grounds that the request is based on misleading evidence.

Sincerely,

Kevin P. Block

Planning Application PJR-001

Admin Cert. Compliance Ag. Or Timber De-		File #			
Or Time Compliance	D	File #			
Ondie. TeservelCont	Design Review Admin	Minor Subdivision		☑ Use Permit	
Conditional Cert of Compliance Cent of Modification Coastal Poss	Design Review Full	☐ Voluntary Me	erger	☐ Variance	
Coastal Permit	General Plan Amendment	Ordinance In Second Unit	terpretation	Zone Change	
Zoning Permit	Lot Line Adjustment	Specific (Ann	Permit	Other	
Zoning Permit for	Major Subdivision		a Plan Amendment		
placing my contact informa mitting it to Sonoma Coun lic information purposes, in	tion (name, address, phon ty PRMD, I understand and cluding my contact informat	e number, email addre I authorize PRMD to p tion.	ess, etc.) on this apposit this application	olication form and to the internet o	
	PRINT	CLEARLY			
APPLIC Ame Samuel Magruder / COO ailing Address 34 December 24	ANT	OWNER (IF	OTHER THAN APPL	ICANT)	
ailing Address		Name			
ailing Address 34 Page St		Mailing Address			
Odil Francis	State CA Zip 94102	City	State	Zip	
ay Ph (707) 347-9539 Fmeil 6	amm@big_rock.com	Day Ph ()	Email		
	Verified by PDPfiller Date 6/29/17	Signature	•	Date	
	ERSONS TO BE NOTIFIED (If listed they must sign	application form)		
Miles II		Name/Title Gian-Paolo Veronese / CFO			
		Mailing Address 34 Page St			
san Francisco	State CA Zip 94102	City San Francisco	State (CA Zip 94102	
ay Ph (707) 347-9539	ed by PDFfiller -rock.com	Day Ph (707) 347-9539	Email gp@big-rock	c.com	
ignature Wike Harden	Date 6/29/17	Signature InPass Vacace		Date 6/29/17	
1dro	PROJECT	INFORMATION			
ddress(es) 334 Purvine Rd			City Petaluma		
Parcel Number(s)	30-018				
roject Description Medical Canr	nabis Cultivation:				
Small Mixed	light, up to 10,000 sq. feet (Type 2B state license) a	and		
Medium Outo	loor, up to 43,560 sq. feet (Type 3 state license)			
creage oz		Thumber of sources			
creage 37 acres		Number of new lots proposed 0			
Site Served by Public Water?	Yes 🛛 No	Site Served by Public Sev	ver 🗌 Yes 🛛 I	No	
	TO BE COMPLE	TED BY PRMD STAFF			
Planning Area 72675	Supervisorial District 2- Rabbit	Latitude 38,247881	Longitude	-122.743183	
Current Zoning LEA B6 100Z, No	one				
Seneral Plan Land Use LEA 100		Specific/Area Plan Peta	aluma Dairy Belt Area	a Plan	
S.P. Land Use None		Violation? Yes No File No.			
Application resolve planning violation?	Yes X No	Penalty application? Yes X No			
evious Files					
Application accepted by		Date 08/16/17			
Approved by					
Approved by		Date			

Sonoma Cot Poffilier Document ID: 816C-07BA-6F3F-0001 Department 2550 Ventura Avenue, Santa Kosa, CA, 95403-2829, (707) 565-1900

02/02/2016

Secretary of State	LLC-1	2017	171	71(0.38			
Articles of Organization		2011	1 1 1		, , , ,			
Limited Liability Company (LLC)								
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IMPORTANT — Read Instructions before completing this form.		Secre	tary of	State	II,			
Filing Fee - \$70.00		State	of Cali	TOTTUE	\bigcirc			
Copy Fees - First page \$1.00; each attachment page \$0.50; Certification Fee - \$5.00	JUN 2 3 2017 (V)							
Note: LLCs may have to pay minimum \$800 tax to the California Frai								
each year. For more information, go to https://www.ftb.ca.gov.	Ì	CC This Space	o Eor Of	Goo Lieo	Only			
1 Limited Liebility Company Name (See Instructions Must con	tois as II Coodis a such				····			
1. Limited Liability Company Name (See Instructions – Must contain an LLC ending such as LLC or L.L.C. "LLC" will be added, if not included.)								
Petaluma Hills Farm, LLC								
2. Business Addresses								
a. Initial Street Address of Designated Office in California - Do not enter a P.O. Box	City (no abbreviations)		State	Zip Code				
34 Page Street	San Francisco		CA	94102				
b. Initial Mailing Address of LLC, if different than Item 2a	City (no abbreviations)		State	Zip Code				
3. Service of Process (Must provide either Individual OR Corporation.)			L	1				
INDIVIDUAL - Complete Items 3a and 3b only. Must include agent's full	name and California stree	et address						
a. California Agent's First Name (if agent is not a corporation)	Middle Name	Last Name	<u></u>		Suffix			
Beau		Epperly	nerly		Esq.			
b. Street Address (if agent is not a corporation) - Do not enter a P.O. Box	City (no abbreviations)	Epperty	State Zip Co					
201 California Street, Suite 450	San Francisco		_	94111				
			CA	7111	<u> </u>			
CORPORATION – Complete Item 3c. Only include the name of the regis	tered agent Corporation.							
c. California Registered Corporate Agent's Name (if agent is a corporation) – Do no	t complete Item 3a or 3b							
4. Management (Select only one box)								

The LLC will be managed by: One Manager More than One Manager All LLC Member(s) 5. Purpose Statement (Do not alter Purpose Statement) The purpose of the limited liability company is to engage in any lawful act or activity for which a limited liability company may be organized under the California Revised Uniform Limited Liability Company Act. 6. The Information contained herein, including in any attachments, is true and correct.

Organizer sign here

Beau Epperly, Esq. Print your name here

LLC-1 (REV 04/2017)

2017 Catifornia Secretary of State www.sos.ca.gov/business/be



State of California Secretary of State

FD50138

FILED

In the office of the Secretary of State of the State of California

MAY-04 2016

This Space for Filing Use Only

Statement of Information

(Domestic Nonprofit, Credit Union and General Cooperative Corporations)

Filing Fee: \$20.00. If this is an amendment, see instructions.

IMPORTANT - READ INSTRUCTIONS BEFORE COMPLETING THIS FORM 1. CORPORATE NAME SUSTAIN FARMS

C3849839

Complete Principal Office Address (Do not abbreviate the name of the city. Item 3 cannot be a P.O. Box.) STREET ADDRESS OF PRINCIPAL OFFICE IN CALIFORNIA, IF ANY STATE ZIP CODE 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 94121 MAILING ADDRESS OF THE CORPORATION CITY STATE ZIP CODE

Names and Complete Addresses of the Following Officers (The corporation must list these three officers. A comparable title for the specific officer may be added; however, the preprinted titles on this form must not be altered.) CHIEF EXECUTIVE OFFICER/ CITY STATE ZIP CODE SAM_MAGRUDER 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 94121 ADDRESS CITY STATE ZIP CODE JASON FLYNT 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 94121 CHIEF FINANCIAL OFFICER/ ADDRESS CITY STATE ZIP CODE AARON FLYNN 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 94121

Agent for Service of Process If the agent is an individual, the agent must reside in California and Item 9 must be completed with a California street address, a P.O. Box address is not acceptable. If the agent is another corporation, the agent must have on file with the California Secretary of State a certificate pursuant to California Corporations Code section 1505 and Item 9 must be left blank.

- NAME OF AGENT FOR SERVICE OF PROCESS [Note: The person designated as the corporation's argent MUST have agreed to act in that cup soity prior to the designation.] TIFFANIE BURRAGE
- STREET ADDRESS OF AGENT FOR SERVICE OF PROCESS IN CALIFORNIA, IF AN INDIVIDUAL CITY STATE ZIP CODE 576 B STREET SUITE 26, SANTA ROSA, CA 95401

Common Interest Developments

2. CALIFORNIA CORPORATE NUMBER

Check here if the corporation is an association formed to manage a common interest development under the Davis-Stirling Common Interest Development Act, (California Civil Code section 4000, et seq.) or under the Commercial and Industrial Common Interest Development Act, (California Civil Code section 6500, et seq.). The corporation must file a Statement by Common Interest Development Association (Form SI-CID) as required by California Civil Code sections 5405(a) and 6760(a). Please see instructions on the reverse side of this form.

11. THE INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT

05/04/2016 DANIEL ADAM ZLATNIK

TYPE/PRINT NAME OF PERSON COMPLETING FORM

ATTORNEY

TITLE SIGNATURE

SI-100 (REV 01/2016)

DATE

APPROVED BY SECRETARY OF STATE

State of California Secretary of State

S

Statement of Information

(Domestic Stock and Agricultural Cooperative Corporations) FEES (Filing and Disclosure): \$25.00. If this is an amendment, see instructions.

IMPORTANT - READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

1. CORPORATE NAME

SI-200 (REV 01/2013)

FARMING INVESTMENT GROUP, INC.

FD50735

FILED

In the office of the Secretary of State of the State of California

MAY-04 2016

APPROVED BY SECRETARY OF STATE

2. CALIFORNIA CORPORATE NUMBER					
C3855263		This Space for Filing Use Only			
No Change Statement (Not applicable if agent address of record is a P.O. Box ad	ddress. See inst	ructions.)			
3. If there have been any changes to the information contained in the last Star of State, or no statement of information has been previously filed, this form If there has been no change in any of the information contained in the last of State, check the box and proceed to Item 17.	n must be comp	leted in its entirety.	•		
Complete Addresses for the Following (Do not abbreviate the name of the city	Items 4 and 5 car	not be P.O. Boxes.)			
4 STREET ADDRESS OF PRINCIPAL EXECUTIVE OFFICE 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 94121	CITY	STATE	ZIP CODE		
5 STREET ADDRESS OF PRINCIPAL BUSINESS OFFICE IN CALIFORNIA, IF ANY	CITY	STATE	ZIP CODE		
6 MAILING ADDRESS OF CORPORATION, IF DIFFERENT THAN ITEM 4	CITY	STATE	ZIP CODE		
Names and Complete Addresses of the Following Officers (The corporation officer may be added; however, the preprinted titles on this form must not be altered.)	n must list these t	hree officers. A comparable	e title for the specific		
7. CHIEF EXECUTIVE OFFICER/ ADDRESS SAM MAGRUDER 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 941	CITY 21	STATE	ZIP CODE		
8 SECRETARY ADDRESS JASON FLYNT 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 94121	CITY	STATE	ZIP CODE		
9, CHIEF FINANCIAL OFFICER/ ADDRESS AARON FLYNN 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 94121	CITY	STATE	ZIP CODE		
Names and Complete Addresses of All Directors, Including Directors What director. Attach additional pages, if necessary.)	o are Also Off	ficers (The corporation mu	ist have at least one		
10. NAME ADDRESS SAM MAGRUDER 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 9412	CITY 21	STATE	ZIP CODE		
11. NAME ADDRESS AARON FLYNN 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 94121	CITY	STATE	ZIP CODE		
12 NAME ADDRESS JASON FLYNT 5432 GEARY BLVD. #120, SAN FRANCISCO, CA 94121	CITY	STATE	ZIP CODE		
13. NUMBER OF VACANCIES ON THE BOARD OF DIRECTORS, IF ANY:					
Agent for Service of Process If the agent is an individual, the agent must reside in address, a P.O. Box address is not acceptable. If the agent is another corporation, the certificate pursuant to California Corporations Code section 1505 and Item 15 must be left	e agent must hav	em 15 must be completed wi e on file with the California	ith a California street Secretary of State a		
14. NAME OF AGENT FOR SERVICE OF PROCESS TIFFANIE BURRAGE					
15. STREET ADDRESS OF AGENT FOR SERVICE OF PROCESS IN CALIFORNIA, IF AN INDIVIDED 576 B STREET SUITE 26, SANTA ROSA, CA 95401	DUAL CITY	STATE	ZIP CODE		
Type of Business					
16 DESCRIBE THE TYPE OF BUSINESS OF THE CORPORATION HOLDING COMPANY					
17 BY SUBMITTING THIS STATEMENT OF INFORMATION TO THE CALIFORNIA SECRETA CONTAINED HEREIN, INCLUDING ANY ATTACHMENTS, IS TRUE AND CORRECT 05/04/2016 DANIEL ADAM ZLATNIK ATTOR		HE CORPORATION CERTIFIES	S THE INFORMATION		
DATE TYPE/PRINT NAME OF PERSON COMPLETING FORM	TITLE	SIGNATU	RE		

Page 1 of 1

From: Sanjay Bagai <sanjay.bagai@gmail.com>

Sent: October 26, 2017 11:56 AM

Crystal Acker To:

Subject: Fwd: Animal Rescue email to Crystal Attachments: 2017-10-26 (1).jpg; 2017-10-26 (2).jpg

URGENT: File UPC17-00200 (334 Purvine Rd. in Petaluma)

Ms. Crystal Acker,

I am writing to you again in response to file UPC17-00200, the proposed cannabis development at 334 Purvine Rd, and the animal rescue they are currently operating on the property.

I live at 105 Purvine Rd and noticed a staunch increase in traffic and animals traveling down Purvine Rd. Upon inquiring, I was informed that this increase in traffic is due to an animal rescue that they have headquartered, and are currently operating, on the property.

I was not made aware of their intent to operate an animal rescue by either the owners or the County; this fact is concerning. Their official Facebook page identifies their organization as being called The Animal Emergency Evacuation Coordinators Coalition. Attached to this email are photographs from the operation's Facebook page (taken today), which indisputably identifies their rescue as being located at 334 Purvine Rd.

Doesn't this type of operation need a permit from the County? Since this organization is already established on the property, why was it not reflected in their cannabis permit application (File UPC17-00200)? This animal rescue raises many of the same concerns I mentioned in my previous emails, with respect to groundwater contamination, increased traffic, safety and waste runoff.

Additionally, last week it turns out they have three dead animals in their operation, is there any oversight as to how these rescue shelters are managed?

Please send me any information you have on file regarding their animal rescue permit, if applicable.

I look forward to your response,

Sanjav 510 599 5272 sanjay.bagai @gmail.com www.zequus.com

Drew A Buechley

3641 Middle Two Rock Road Petaluma, CA 94952 415-519-1247

October 25th, 2017

Crystal Acker

Project Planner Permit Resource & Management Department 2550 Ventura Avenue, Santa Rosa

Dear Ms. Acker,

I am writing to you in response to file UPC17-00200: The proposed Permit for cannabis cultivation at 334 Purvine Rd. in Petaluma.

As a neighbor to this property, I am greatly concerned about this application and the potential impacts of this large-scale operation on our countryside and greater community. I am also disappointed that I have not already been notified about this application by the County's Permit & Resource Management Department. In light of this fact, I am requesting that you notify me at dbuechley@gmail.com of any future developments or changes to this application, and of any opportunities to publicly air my concerns.

Specifically, I reside at 3641 Middle Two Rock Road and own 260 acres. I have lived in this area for the last 10 years. I operate a farm including horse training, silage and hay growing and a vineyard on my property. Over the years we have evaluated uses of the property with a close eye on water availability, even surface water availability. The neighbor's property was denied a permit for a mushroom farm by the county based solely upon the scarcity of water. The proposed cannabis business, which is a high-water crop, raises many concerns about this proposed permit's impact on our area's water quality, availability, safety and traffic. Furthermore, I /we believe that the proposed plan would also contribute to increased theft, odor, and would have permanent effects on the cultural and natural landscape of the area.

Please know that I will be contacting my supervisor, David Rabbit, to express my concerns about this permit further.

Sincerely,

Drew A Buechley

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MANAGEMENT DEPARTME

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3641 Middle Two Rock Road Petaluma, CA 94952 415-519-1247

October 25th, 2017

Crystal Acker

Project Planner
Permit Resource & Management Department
2550 Ventura Avenue, Santa Rosa

1, 4

Dear Ms. Acker,

I am writing to you in response to file UPC17-00200: The proposed Permit for cannabis cultivation at 334 Purvine Rd. in Petaluma.

As a neighbor to this property, I am greatly concerned about this application and the potential impacts of this large-scale operation on our countryside and greater community. I am also disappointed that I have not already been notified about this application by the County's Permit & Resource Management Department. In light of this fact, I am requesting that you notify me at nat@natguion.com of any future developments or changes to this application, and of any opportunities to publicly air my concerns.

Specifically, I reside at 3641 Middle Two Rock Road and own 260 acres. I have lived in this area for the last 10 years. I operate a farm including horse training. Over the years we have evaluated uses of the property with a close eye on water availability, even surface water availability. The neighbor's property was denied a permit for a mushroom farm by the county based solely upon the scarcity of water. The proposed cannabis business, which is a high-water crop, raises many concerns about this proposed permit's impact on our area's water quality, availability, safety and traffic. Furthermore, I /we believe that the proposed plan would also contribute to increased theft, odor, and would have permanent effects on the cultural and natural landscape of the area.

Please know that I will be contacting my supervisor, David Rabbit, to express my concerns about this permit further.

Sincerely,

Nathalie GUION

From: Phoebe Lang <phoebehlang@gmail.com>

Sent: October 26, 2017 12:20 PM

To: Crystal Acker

Subject: Fwd: Animal Rescue email to Crystal 2017-10-26 (1).jpg; 2017-10-26 (2).jpg

URGENT: File UPC17-00200 (334 Purvine Rd. in Petaluma)

Ms. Crystal Acker,

I am writing to you in response to file UPC17-00200, the proposed cannabis development at <u>334 Purvine Rd</u>, and the animal rescue they are currently operating on the property.

I live at 105 Purvine Road and have noticed a robust increase in traffic and animals traveling down Purvine Rd. Upon inquiring, I was informed that this increase in traffic is due to an animal rescue that they have headquartered, and are currently operating, on the property.

I was not made aware of their intent to operate an animal rescue by either the owners or the County; this fact is concerning. Their official Facebook page identifies their organization as being called <u>The Animal Emergency Evacuation Coordinators Coalition</u>. Attached to this email are photographs from the operation's Facebook page (taken today), which indisputably identifies their rescue as being located at <u>334 Purvine Rd</u>.

Doesn't this type of operation need a permit from the County? Since this organization is already established on the property, why was it not reflected in their cannabis permit application (File UPC17-00200)? This animal rescue raises many of the same concerns with respect to groundwater contamination, increased traffic, safety and waste runoff that I have around their cannabis use permit application.

Please send me any information you have on file regarding their animal rescue permit, if applicable.

I look forward to your response,

Phoebe Lang

--

Phoebe Lang
phoebehlang@gmail.com
415 601 5547
105 Purvine Rd
Petaluma CA 94952

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM. Warning: If you don't know this email sender or the email is unexpected, do not click any web links, attachments, and never give out your user ID or password.

From: Richard Strozzi-Heckler <richard@strozziinstitute.com>

Sent: October 26, 2017 12:00 PM

To: Crystal Acker
Subject: No Pot On Purvine!
Attachments: PastedGraphic-12.tiff

Richard Strozzi-Heckler, PhD.

4101 Middle Two Rock Road Petaluma, Ca.94952 707 484 5193

October 26, 2017

Crystal Acker

Project Planner Permit Resource & Management Department 2550 Ventura Avenue, Santa Rosa

Dear Ms. Acker,

I am writing to you in response to file UPC17-00200: The proposed Permit for cannabis cultivation at 334 Purvine Rd. in Petaluma.

As a neighbor to this property, I am greatly concerned about this application and the potential impacts of this large-scale operation on our countryside and greater community. I am also extremely disappointed that I have not already been notified about this application by the County's Permit & Resource Management Department. In light of this fact, I am requesting that you notify me at richard@strozziinstitute.com of any future developments or changes to this application, and of any opportunities to publicly air my concerns.

Specifically, I reside at 4101 Middle Two Rock Road and own 13 acres. I have lived in this area for the last 30 years. Over the years my neighbors have been denied expansion of their business by the County on the premise of water availability and I stopped growing pinot grapes because of water shortage. As a property owner in close proximity to this proposed cannabis business, which is a high-water crop, I have many concerns about this industry's impact on our area's water quality, availability, safety and traffic. Furthermore, I believe that the proposed plan would also contribute to increased theft, odor, and would have permanent effects on the cultural and natural landscape of the area. Myself, my neighbors and friends that use this area for hiking, biking and other recreational uses are very much opposed to this business venture.

Please know that I will be contacting my supervisor, David Rabbit, to express my concerns about this permit further.

Sincerely,

Your Name

Richard Strozzi-Heckler

First, say to yourself what you would be, and then do what you have to do.
-Epictetus



FOLLOW: http://strozziinstitute.com/blog/ (Strozzi Institute blog)

LIKE: https://www.facebook.com/Strozzilnstitute

CONNECT: http://www.linkedin.com/company/strozzi-institute

1700 Broadway, 8th Floor | Oakland, CA 94612 | Office 510.444.1232 | www.strozziinstitute.com

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From: Amy BeberVanzo <amy.bebervanzo@gmail.com>

Sent: October 17, 2017 2:32 PM

To: Crystal Acker
Cc: David Rabbitt
Subject: File UPC17-00200

Dear Ms. Acker,

I am writing to you in response to File UPC17-00200: The proposed Permit for cannabis cultivation at 334 Purvine Rd. in Petaluma.

As a resident of the Petaluma Valley water plain west of Petaluma city, I am greatly concerned about this application and the potential impacts of this large-scale operation on our countryside and greater community. I am also disappointed that I have not already been notified about this application by the County's Permit & Resource Management Department. In light of this fact, I am requesting that you notify me at amy.bebervanzo@gmail.com of any future developments or changes to this application, and of any opportunities to publicly air my concerns.

Specifically, I reside at 562 Fairview Court and own 22 acres. I have lived here for the last 20 years, and in the greater Petaluma area for 30 years. Over the years my neighbors and I have had difficulty subdividing properties in the County on the premise of water availability. Other neighbors have drilled in multiple sites on their lands to replace failed wells. As a property owner on the same water table as this proposed cannabis business — which is a high-water crop — I have many concerns about this industry's impact on our area's water quality, availability, safety and traffic. Furthermore, I believe that the proposed plan would also contribute to increased theft, odor, and would have permanent effects on the cultural and natural landscape of the area.

Sincerely,

Amy BeberVanzo

amy.bebervanzo@gmail.com

THIS EMAIL ORIGINATED OUTSIDE OF THE SONOMA COUNTY EMAIL SYSTEM.

Ayn and James Garvisch

625 Purvine Rd• Petaluma, CA 94952 Phone: 510-813-8866 •

Date: 09/01/17

Crystal Acker Project Planner County of Sonoma PRMD 2550 Ventura Ave Santa Rosa, CA 9540

Dear Crystal:

We are writing to you on in regards to the proposed use permit for cannabis cultivation on a large scale at 334 Purvine RD Petaluma 94952, UPC17-0020.

As a residents of and landowners of 18 acres on Purvine Rd for 8 years, we are very concerned about the potential cannabis operation in close proximity to our home, family and property. Not only is it contradiction with the historic and current allowable land use in the area, we feel there are potential grave areas of concern if this is approved: Namely, water, odor, safety and security of our loved ones, the massive scale of the proposed project, road traffic, and historic preservation of structures.

Water: We have two slow wells on our property and in a low water LEA 100 Z zoning we are restricted to building on our property. Over the last 9 years we have run out of water due to unforeseen circumstances and weather related issues more than once, and had to have water trucked in. The cattle that graze our fields and our lively hood are tied to this scarce source.

Odor: We are directly down wind of the proposed site, and we do not think it is fair for us, or our high school aged daughter, and potential grandchildren to have to the smell of cannabis on a daily basis, when it is federally illegal and something that we are trying to keep our children from using.

Safety: We are lucky to have wonderful neighbors and a community that looks out for each other, but unfortunately Purvine, and the neighboring Middle Two Rock road are know as dumping locations, where people assume they can dump old couches, mattresses, etc. along the side of the road without anyone noticing. With the cannabis operation in close proximity, we worry that this will also attract a further criminal element to the neighborhood and the safety and security of our family is of upmost concern.

Large scale of the project: It is my understanding that the homeowner has 37 acres of land, yet this project encompasses almost double that space according to the permit. This speaks to all of my other concerns even at 37 acres.

Road traffic: Our roads are in dire need of attention and the added traffic on Purvine and neighboring roads because of this operation may be too much for it to handle without proper paving and yearly attention.

Preservation of Historic structures: Barns, coops and old farmhouses are what make Petaluma and its outskirts what it is. By tearing down these historic structures to make way for grow space violates the historic nature of the area and every effort should be made to preserve these structures.

We do hope to get our concerns addressed and to have input on this proposed project.

Sincerely,

Ayn and James Garvisch 625 Purvine Rd

EXHIBIT C

Public Comments

Applicant's public outreach correspondence with neighbors and special interest groups

From: Sam Magruder <samm@big-rock.com>

Sent: April 01, 2019 10:50 AM

To: Crystal Acker
Cc: Paula Blaydes

Subject: In support of 334 Purvine rd

Attachments: Sam Magruders comments for public record .pdf

Hello,

Crystal,

I wanted to submit the following documents for the public record in support of our project at 334 Purvine. Rd Please see attached pdf document. This document contains our attempts to reach out to the No Pot on Purvine rd group to listen to their concerns and discuss our project. It also outlines the harassment by this neighborhood group and its members.

We would like this to be part of the packet that is presented to the BZA commissioners as I am sure the neighbors oppositions letters will be.

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Warning: If you don't know this email sender or the email is unexpected, do not click any web links, attachments, and never give out your user ID or password.

Thank you,

Samuel Magruder COO Petaluma Hills Farm 334purvine.com samm@big-rock.com 415-624-5113 From: Sam Magruder samm@big-rock.com

Subject: Meeting and information

Date: December 14, 2017 at 1:03 PM

To: No Pot On Purvine nopotonpurvine@gmail.com

Cc: Mark Essick mark essick@gmail.com, Jennifer Abrao jennifer abrao@sonoma-county.org, Crystal Acker

Crystal Acker@sonoma-county.org, David.Rabbitt@sonoma-county.org

Dear Neighbors,

We have seen your signs on Purvine and the associated web site. We are once again reaching out in hopes we can connect in person to help answer any questions you may have, and also clear up some inaccuracies that we have read on the site.

First, we hope you'll note that we are good neighbors and citizens doing business openly and legally. Petaluma Hills Farm is designed - and once permitted, will be built - to exceed expectations for this type of operation. From farming methods and land preservation, to energy and water conservation and sustainability being good stewards of the land is important to us.

We are here to help our community and neighbors understand the facts and answer any questions you may have. While we may not be able to change your opinion of our business, we'd appreciate and welcome an open dialogue to address your concerns.

Would you be open to sitting down together? We are happy to meet at a time and place that is most convenient for you. If you're willing to come to our address, we would be delighted to show you a map of our vision for Petaluma Hills Farm.

We hope we can set something up soon, and will always be available in the future as well.

If you'd like to keep up with our progress and activities we have a website, <u>334purvine.com</u>, for our community to stay connected and engaged.

Best Regards, Sam Magruder and Gian-Paolo Veronese

Thank you,

Samuel Magruder COO Petaluma Hills Farm 334purvine.com samm@big-rock.com 415-624-5113 From: No Pot On Purvine nopotonpurvine@gmail.com

Subject: Re: Meeting and information

Date: December 19, 2017 at 7:31 PM

To: Sam Magruder samm@big-rock.com

Cc: Crystal Acker Crystal Acker@sonoma-county.org, David.Rabbitt@sonoma-county.org, Jennifer Abrao

jennifer abrao@sonoma-county.org, Mark Essick mark.essick@gmail.com

Sam and Gian-Paolo:

Thank you once again for reaching out to our group. Our response to your offer remains the same as it was two weeks ago: we are still seeking information at this time from unbiased sources, to better deifne our concerns with your project and other proposed projects in the neighborhood. While we understand that you are interested in quelling our concerns, we feel that the documents provided by you and your associates, to the County PRMD, speak for themselves. We will reach out to you when we are interested in hearing from you, and when we feel that the time is right.

Thank you, also, for looking at our website and offering your feedback. Please be assured that the information we have represented on our website as factual has exclusively been sourced from your application, the rest is opinion. It is not inaccurate, however, to say that we are a coalition of 40+ neighbors who are mobilizing to define appropriate land-use in the Two Rock Valley.

We look forward to talking with you and discussing the merits of your proposed project, at a future date.

On Thu, Dec 14, 2017 at 13:03 Sam Magruder < samm@big-rock.com > wrote:

Dear Neighbors,

We have seen your signs on Purvine and the associated web site. We are once again reaching out in hopes we can connect in person to help answer any questions you may have, and also clear up some inaccuracies that we have read on the site.

First, we hope you'll note that we are good neighbors and citizens doing business openly and legally. Petaluma Hills Farm is designed - and once permitted, will be built - to exceed expectations for this type of operation. From farming methods and land preservation, to energy and water conservation and sustainability being good stewards of the land is important to us.

We are here to help our community and neighbors understand the facts and answer any questions you may have. While we may not be able to change your opinion of our business, we'd appreciate and welcome an open dialogue to address your concerns.

Would you be open to sitting down together? We are happy to meet at a time and place that is most convenient for you. If you're willing to come to our address, we would be delighted to show you a map of our vision for Petaluma Hills Farm.

We hope we can set something up soon, and will always be available in the future as well.

If you'd like to keep up with our progress and activities we have a website, <u>334purvine.com</u>, for our community to stay connected and engaged.

Best Regards,

0 11 1 10: 0 11!

Sam Magruder and Gian-Paolo Veronese

Thank you,

Samuel Magruder COO Petaluma Hills Farm 334purvine.com samm@big-rock.com 415-624-5113 From: Sam Magruder samm@big-rock.com Subject: Neighborhood meeting December 11th Date: December 8, 2017 at 4:56 PM

To: nopotanpurvine@gmail.com

Cc: mark.essick@gmail.com, Crystal Acker Crystal Acker@sonoma-county.org

SM

Hello no pot on purvine group,

We understand that you have an upcoming meeting on December 11th to discuss community safety in relationship to our proposed cannabis cultivation facility at 334 Purvine Rd.

Community safety is very important to us and we have been in contact with the Sonoma County Sheriff's office discussing our security plans and looking for feedback. After having a productive conversion with Captain Mark Esscik, we now understand more about his concerns around illegal cannabis business. And, he now understands our legal cannabis project better so, I would like to once agin offer to come and meet with your group. You are also invited to visit the project site and we would be happy to walk you through our security plans. We want to better understand your concerns and go over our security plan with your group. From the beginning of this project, we have been open to dialogue and we remain so.

Please let me know if we can attend the meeting. If not that is ok as we respect your choices. I have CC'ed both Crystal Acker at PRMD and Captain Mark Essick on this email so that we can all stay in communication as we strongly believe in open communication.

Just to make a few points clear about our farming operation:

- 1. We are not a dispensary or a retail location. So what does that mean? This means we will NOT have retail customers coming and going from the property. We will NOT have cash at the property as no sales will occur on site. Once harvested and packaged, all the product will be taken to an offsite licensed distribution company.
- 2. There is misinformation floating around in regards to a guard tower. There is not nor was there ever a guard tower proposed for this project. There will be a security gate at the front entrance with an electronic check-in station very similar to the security gate at Liberty Duck Farm up the street on Middle Two Rock Road.

We are happy to address and better understand any concerns you have so, please feel free to reach out to me.

Thank you,

Samuel Magruder COO Petaluma Hills Farm 334purvine.com samm@big-rock.com

Thank you,

Samuel Magruder COO Petaluma Hills Farm 334purvine.com samm@big-rock.com 415-624-5113 From: No Pot On Purvine nopotonpurvine@gmail.com Subject: Re: Neighborhood meeting December 11th

Date: December 10, 2017 at 8:34 PM To: Sam Magruder samm@big-rock.com

Cc: mark.essick@gmail.com, Crystal Acker Crystal.Acker@sonoma-county.org



Sam, Thank you for reaching out. While we understand your interest, the meeting remains a closed, invitation only event where Two Rock residents will be able to voice their questions and concerns with the Sheriffs department. This meeting will not focus on one application in particular, but will instead address the potential cumulative impact of cannabis in our neighborhood.

Regarding your offer of open discourse: our organization's membership may be interested in talking with you and other cannabis applicants in the area, at a future date. We will keep you posted.

In the meantime, please be assured that we understand that your location is not a dispensary or retail facility and does not have a guard tower. In light of your offer to send us information regarding your operation, we would appreciate it if you would send us the security plan you submitted to the county, as it is unavailable for public review through PRMD.

On Fri, Dec 8, 2017 at 4;56 PM, Sam Magruder <samm@big-rock.com> wrote: Hello no pot on purvine group,

We understand that you have an upcoming meeting on December 11th to discuss community safety in relationship to our proposed cannabis cultivation facility at <u>334 Purvine Rd.</u>

Community safety is very important to us and we have been in contact with the Sonoma County Sheriff's office discussing our security plans and looking for feedback. After having a productive conversion with Captain Mark Esscik, we now understand more about his concerns around illegal cannabis business. And, he now understands our legal cannabis project better so, I would like to once agin offer to come and meet with your group. You are also invited to visit the project site and we would be happy to walk you through our security plans. We want to better understand your concerns and go over our security plan with your group. From the beginning of this project, we have been open to dialogue and we remain so.

Please let me know if we can attend the meeting. If not that is ok as we respect your choices. I have CC'ed both Crystal Acker at PRMD and Captain Mark Essick on this email so that we can all stay in communication as we strongly believe in open communication.

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- 2. There is misinformation floating around in regards to a guard tower. There is not nor was there ever a guard tower proposed for this project. There will be a security gate at the front entrance with an electronic check-in station very similar to the security gate at Liberty Duck Farm up the street on Middle Two Rock Road.

We are happy to address and better understand any concerns you have so, please feel free to reach out to me.

Thank you,

Samuel Magruder COO Petaluma Hills Farm 334purvine.com Sam Magruder's record of events and harassment by No Pot on Purvine and their self-proclaimed leaders Sanja Bagai and Phobe Lang

October 13th 2017

Fires in Sonoma County devastate Santa Rosa.

A nonprofit named The Animal Emergency Evacuation Coordinator Coalition approach us and ask us if they can use our property as a safe area for animals that need to be evacuated from the fire zone. We feel it's our duty to help in any way we can. We allow property owners who have to evacuate and need a place for their farm animals or personal pets to bring them to our property out of the fire zone.

The volunteer group sets up at our farm and donations of food and volunteers arrive to help. One group of sheep is brought by a property owner who needed to evacuate and 4 cats and 3 dogs are dropped off by their owners over the next couple of days.

The non-profit coordinators begin receiving harassing Facebook post and phone calls from Sanjay Bagai. An animal control officer comes out to the property and states one of the neighbors called and says we are "running an illegal animal shelter." We receive no citation but the volunteers are very shaken and state they feel very intimidated. By October 23rd all animals have been reunited with their owners and all donations of food and animal health products are distributed.

PRMD on October 26th receive two letters one from Sanjay Bagai and one from his wife Phoebe Lang claiming that we are running an illegal animal shelter and they try to tie it to the cannabis application.

Nov 4th 2017

Petaluma Hills Farm LLC host a neighbor day event so that the neighbors can come over and learn about what our proposed cannabis project is going to look like, who we are, and so that we can discuss their concerns.

Between 20- 30 neighbors show up and we have a very productive meeting. The feedback from those who came is very positive and supportive. During this event several cars come by and stop in front of our property and take pictures.

The No Pot on Purvine group is invited to this event, but they refuse to come.

March 25th 2018

Myself and my girlfriend host a lamb roast for our group of friends, Mike Harden, his family and friends, GP his family and friends and Jared Rivera and his family and friends.

This was an invitation only event that was not ticketed. It was a potluck for our friends and family so that we could show them our farm and get folks out onto the land. During this event a silver SUV drove by several times and took pictures of us.

April 2018

350 sq/ft Hoop house is completed and used as temp rain and weather structure for vegetable seedlings for the 5 acres of veg garden and 12-16 cannabis seedlings planted by the tenant Jared Riveira for his medical cannabis garden.

See pictures

May 15th 2018

Sonoma Hills Farm host Chefs cycle event on the property. This a permitted event through Sonoma county. Permits are held by event host. We are a designated rest stop on rout. We host many chefs as they bike and raise money for charity.

The No Pot on Purvine group really step up their harassment. They remove directional signs that are laid out for the bikers. A silver SUV drives by over and over again taking pictures. Sanja Bagia calls and harasses and intimidates one of the events coordinators. This action is truly disturbing and scary for us all. One sponsor pull's out of the lunch event at our property and has to move it because of security concerns. See transcript of Sanja Bagia's voice mail.

June 9th 2018

My bussines partners wife hosts a surprise birthday party for Mike Harden her husband, an owner of 334 Purvine rd. A bus was rented to take party goers up to the property so no one has to drive the hour or more up from San Francisco. It was not ticketed, there was no amplified music and only friends and family. As soon as we pulled up in the bus a silver SUV coming from the direction of Sanjay Bagia's house pulled up and started taking pictures and driving back and forth. We had a pig roast, had an acoustic string band and it was a very fun and special evening with Mike and his family and friends. We were determined to not let the intimidation and harassment destroy the evening.

August 19th 2018

"PotatoPalooza"

Non-ticketed hosted by Chefs Garden/Sonoma Hills Farm, event invites to the neighbors, friends, family and our extended network to come out and help us harvest potatoes from our 4 acres. We asked that people sign in for the event. We had a farm stand set up on the property so that people could by produce. There was about 30-50 in total that attended but the peak amount of people was 30 at one time. People filtered in and out from 1-5pm. There was no amplified music, people bring their own beer and Jared bough a keg of beer. There was roasted

potatoes from the farm in the roaster that lives on the property. This event was designed for the community to come and interact with Chefs Garden vegetable farm and help them bring in the potato crop. We later found out that Sanja Bagia and No pot on Purvine hired a private detective to pretend to be a participant and trespass on our land with the purpose of taking pictures of the tenant's medical cannabis garden so they could falsely claim it was a commercial cultivation.

September 5th 2018

Jared Rivera the tenant on the property called me supper up set and scared. He told me he witnessed an altercation on the road bordering our upper property. He said he saw someone in an Audi arguing with a car that was parked on the road. He told me that then the Audi came speeding down the road towards his house, stopped in from of his house and Sanjay Bagia jumped out and came towards him shouting "I am going to kill you, you motherfucker I am going to kill you, you mother fucker"

Jared stated he was extremally scared and didn't know what to do so he pulled out his phone to record Sanja in hopes he would stop. Jared stated when Sanjay saw the phone he stopped and said "oh hi I was just stopping by to see the kids, how are the kids". This is extremally odd as Sanjay has never meet Jared's kids and he is not a neighbor who interacts with Jared's family. I advised him to call the Sheriffs office which he did and he filed a report. Jared was shaken up worried about the safety of his family and considering moving off of the property.

October 23rd 2018

We receive an email from Tyra Harrington, Sonoma County Code enforcement manager, stating she has received a complaint about us having a commercial cultivation, hosting unpermitted events, building an unpermitted greenhouse, a unpermitted Yurt, and converting our barn into a dining hall. This complaint was submitted by No Pot on Purvine, and neighbors Phobe Lang, Sanja Bigia, Ayn Garvisch, and Brit Christinsen. As soon as we are aware of the complaint we invited code enforcement onto the property to inspect the property. They inspect the property on October 25th 2018 and found no violations related to above complaint. See supporting follow up email from Tyra Harrington and Ryan Pelleriti

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	*	

June 11, 2018

Sanjay Bagai 105 Purvine Road Petaluma, CA 94952

Dear Mr. Bagai:

On May 15 and May 17, 2018, Sonoma Hills Farms ("SHF"), owners of the 334 Purvine Road property (the "Farm"), hosted bikers participating in No Kid Hungry's Chef Cycle, an event that raised awareness and funds for an important cause, and the type of socially responsible activity that SHF proudly supports. Unfortunately, the Chef's Cycle coincided with an intensification of troubling conduct on your part, which has occurred since SHF announced our intention to permit legal cultivation of cannabis on the Farm. Although it has been a few weeks since the event, I write now with two goals: (1) to inform you that SHF will promptly take legal action should you or your colleagues undertake further unlawful activity to disrupt or harm our events, operations or tenants; and (2) to invite you again to meet and discuss measures SHF might take to mitigate neighborhood concerns about the Petaluma Hills Farms cannabis operation.

We are aware that California's legalization of commercial and recreational cannabis remains controversial in some parts, and that even reasonable people still have concerns due to facts and myths from pre-Prop 64 times when cannabis was solely an illegal activity. And though we firmly believe that the legalization and responsible commercialization of cannabis will result in countless benefits to society and the Purvine Road community, we respect the rights of our neighbors to legally disagree.

However, your opposition to our proposed cannabis operations has not always been legal. You have published falsehoods about our operations, from claiming we defrauded the sellers in purchasing the property to grossly exaggerating our proposed water usage. You have also made false and wrongful statements about Petaluma Hills Farms and our associates, explicitly accusing us of criminal activities like breaking and entering into your house and illegally trafficking in narcotics, while suggesting our involvement in more violent crimes like battery and manslaughter. Free speech is your right, but we will not tolerate further defamatory acts, negatively impacting innocent parties or our operations.

Similarly, you have harassed third parties, like Angela Alioto and No Kid Hungry, who have no personal or commercial interest in SHF or Petaluma Hills Farms, with emails, voice messages and other acts. In fact, your abusive messages to the No Kid Hungry staff during the Chef Cycle were so threatening that they were advised by security personnel to contact the local Sheriff's department to ensure safety of bikers while at the Farm. (A recording of your angriest voice message is attached.) Similarly, your occasional protests have threatened our tenant family on the Farm, prompting them to contact the sheriff out of fear for their safety. We accept peaceful protest; but will seek restraining orders against further harassment.

I trust that you are aware that SHF and Petaluma Hills Farms also have rights—the right to peaceably own and operate businesses on the Farm, including, upon issuance of a permit, cannabis cultivation. And we have no intention of abandoning that right and ending our operations. We also have no intention of being a bad or insensitive neighbor. We are, and will be, a good and lawful neighbor and a corporate enterprise of high standards and integrity. And though we could

operate Petaluma Hills Farms many ways within the law, as proof of our good intention, we would like to invite you again to meet with us on the Farm, either personally or as part of a community event, to discuss our cannabis and other operations, as well as to consider suggestions you may have, short of ending operations, to facilitate a less contentious integration of our businesses into the community.

We hope you will consider participating in a good faith dialogue. We may not reach full agreement, but as long-term neighbors, we should try to achieve some meaningful and civil accommodation. Please do not hesitate to contact me to schedule a convenient time to address these matters. I can be reached at the accompanying email.

Very truly yours,

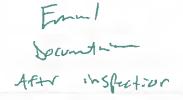
Sam Magruder COO Petaluma Hills Farms

Cc: Michael Harden

Cael S. Davis, Esq.

From: Tawnie Scarborough tawnie@cannacodecompliance com

Subject: Fwd: Follow up for 334 Purvine Rd
Date: November 6, 2018 at 6:08 PM
To: Sam Magruder samm@big-rock.com





----- Forwarded message ------

From: Tyra Harrington < Tyra Harrington@sonoma-county.org>

Date: Tue, Nov 6, 2018 at 5:56 PM Subject: RE: Follow up for 334 Purvine Rd

To: Tawnie Scarborough tawnie@cannacodecompliance.com

I will look into where it was sent and get back to you in the morning.

Sent from my Verizon 4G LTE smartphone

----- Original message -----

From: Tawnie Scarborough decompliance.com

Date: 11/6/18 4:47 PM (GMT-08:00)

To: Tyra Harrington < Tyra. Harrington@sonoma-county.org>

Subject: Re: Follow up for 334 Purvine Rd

Hi Tyra,

One more question. Sam reported that no notice and order has been issued (onsite or by email).

I'm just following up on what they should expect for timeline and activities.

On Mon, Oct 29, 2018 at 3:34 PM Tyra Harrington < Tyra Harrington@sonoma-county.org> wrote:

We don't send a letter out for items that are not violations but I can include in this email, Ryan's notes on the visit that might help which is public record.

"Site visit on this date with representative Tawnie Scarborough, her associate, the tenant of the cottage and the owners of Sonoma Hills Farm.

The greenhouse has been up just under six months and is 336 square feet, for vegetables, no electrical or mechanical observed. Permit exempt at this time.

The cannabis grow on site has been removed and had approximately ten plants on a property with two dwellings. No violation.

The yurt was actually a canvas tent without framing, electrical or mechanical. It has been up for under six months and showed little evidence of habitation. The tent was approximately 150 square feet in size. Permit exempt.

The large barn was set up for storage and had a small amount of cannabis drying inside of it (remaining from the personal grow. The persons in attendance said they have had

a neignborhood party in it and that is all. They did not charge for this gathering. The barn had no apparent change of occupancy nor did it have any recent construction inside of it.

The barn that was alleged to be used for events has structural improvements consisting of new framing on the west side of it as well as two large barn doors with new framing. a possible change of occupancy to this structure will require consulting with building staff. It has a piano, chairs outdoor lighting and a small bar in the south west corner of it. There is substandard electrical in this structure above the barn doors. They have an exposed junction box with the lighting that is designed to be plug in being hard wired into said junction box. A licensed electrician should be utilized to remove the hard wired outdoor lights and cover the junction box.

The owners of the LLC will provide a detailed list of events with dates and estimated head count.

No violation notices were issued pending review with management."

From: Tawnie Scarborough [mailto:tawnie@cannacodecompliance.com]

Sent: Monday, October 29, 2018 3:20 PM

To: Tyra Harrington < Tyra. Harrington@sonoma-county.org > Cc: Ryan Pelleriti < Ryan. Pelleriti@sonoma-county.org >

Subject: Re: Follow up for 334 Purvine Rd

Tyra,

Follow up to my last question.

Can a letter be issued from your department outlining the code violations that triggered the site walk with a summary of findings?

Basically, because there has been a TRO against 334 Purvine for these claimed activities, its important for the judge to see that the county reviewed and did not find these issues to exist.

Having only a notice & order of unpermitted construction does not disqualify the rest of the claims.

Thank you.

On Mon, Oct 29, 2018 at 3:03 PM Tawnie Scarborough cambacodecompliance.com> wrote:

Thank you Tyra.

Can you outline for me the most efficient next steps for us to respond to the notice and order.

On Mon, Oct 29, 2018 at 1:59 PM Tyra Harrington < Tyra. Harrington@sonoma-county.org> wrote:

We will be sending out a notice and order for "unpermitted construction in barn including wall framing and hazardous electrical." in tomorrow's mail the owner of the property and posting it on the property.

From: Tawnie Scarborough [mailto:tawnie@cannacodecompliance.com]

Sent: Thursday, October 25, 2018 9:06 PM

To: Tyra Harrington < Tyra. Harrington@sonoma-county.org > Cc: Ryan Pelleriti < Ryan. Pelleriti@sonoma-county.org >

Subject: Follow up for 334 Purvine Rd

Hi Tyra,

At the end of the site walk, Ryan shared that he would be submitting his findings to you for review.

I'm following up to request a copy of the report, thank you.

Best Regards,

Tawnie Scarborough

Cannabis Compliance Advisor

CannaCodeCompliance.com



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Best Regards,

Tawnie Scarborough Cannabis Compliance Advisor CannaCodeCompliance.com

Best Regards,

Tawnie Scarborough Cannabis Compliance Advisor CannaCodeCompliance.com

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Best Regards,

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Best Regards,

Tawnie Scarborough Cannabis Compliance Advisor CannaCodeCompliance.com From: Sam Magruder samm@big-rock.com Subject: Re: 334 Purvine rd Sonoma Hills Fram Ilc

Date: January 24, 2019 at 8:44 AM

To: Ryan Pelleriti Ryan.Pelleriti@sonoma-county org
Cc: Tyra Harrington Tyra.Harrington@sonoma-county org



Ryan,

Good to see you yesterday at the farm for your inspection. Just wanted to follow up with you on getting a copy of your notes from your visit. As you saw we have done no construction without permits and there is still no commercial cannabis cultivation going on.

Sorry a couple of our neighbors insist on wasting your and the county's time in order to try and push us off our property.

Thank you,

Samuel Magruder COO Petaluma Hills Farm 334purvine.com samm@big-rock.com 415-624-5113

Jan 18t 2019 Solved False Complet

On Jan 18, 2019, at 6 44 AM, Ryan Pelleriti < Ryan Pelleriti@sonoma-county.org> wrote

Hi Sam.

We received an additional complaint for non-permitted construction.

My gut tells me this might not be true however, we need to do a quick inspection.

Let me know a day that could work for someone to meet me out there late next week.

I'm off Monday and Tuesday.

Ryan Pelleriti

Senior Code Enforcement Inspector

www.PermitSonoma.org

County of Sonoma

Building & Safety Division/ Code Enforcement 2550 Ventura Avenue, Santa Rosa, CA 95403 Direct: 707-565-1921 | Office: 707-565-1900

Fax: 707-565-3767



***MY WORK HOURS ARE NOW TUESDAYS THROUGH FRIDAYS FROM 6:00 AM
TO 4:30 PM***

From: Ryan Pelleriti

Sent: Tuesday, November 20, 2018 6:21 AM **To:** 'Sam Magruder' <<u>samm@big-rock.com</u>>

Subject: RE: 334 Purvine rd Sonoma Hills Fram IIc

From: Ryan Pelleriti Ryan Pelleriti@sonoma-county org @

Subject: RE: 334 Purvine rd Sonoma Hills Fram IIc

Date: January 25, 2019 at 5:47 AM

To: Sam Magruder samm@big-rock.com



Ryan Pelleriti

Senior Code Enforcement Inspector

www.PermitSonoma.org

County of Sonoma

Building & Safety Division/ Code Enforcement 2550 Ventura Avenue, Santa Rosa, CA 95403 Direct: 707-565-1921 | Office: 707-565-1900

Fax: 707-565-3767



MY WORK HOURS ARE NOW TUESDAYS THROUGH FRIDAYS FROM 6:00 AM TO 4:30 PM

From: Sam Magruder [mailto:samm@big-rock.com]

Sent: Thursday, January 24, 2019 8:45 AM

To: Ryan Pelleriti <Ryan.Pelleriti@sonoma-county.org> **Cc:** Tyra Harrington <Tyra.Harrington@sonoma-county.org>

Subject: Re: 334 Purvine rd Sonoma Hills Fram Ilc

Ryan,

Good to see you yesterday at the farm for your inspection. Just wanted to follow up with you on getting a copy of your notes from your visit. As you saw we have done no construction without permits and there is still no commercial cannabis cultivation going on.

Sorry a couple of our neighbors insist on wasting your and the county's time in order to try and push us off our property.

Thank you,

Samuel Magruder COO Petaluma Hills Farm 334purvine.com samm@big-rock.com 415-624-5113 Warning: If you don't know this email sender or the email is unexpected, do not click any web links, attachments, and never give out your user ID or password.

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Comments List

County of Sonoma - For Internal Use Only

Record ID: VCM19-0087

UserID	Comment	Date	Time
RPELLERI	I conducted a site inspection with Todd Hoffman on this date. The tenants allowed access to all structures affiliated with the proposed cannabis cultivation site. No cannabis was observed on site and no additional construction was observed. Okay to close as no violation. 2 hrs RP	01/23/2019	1426

Total Comments: 1

VCM 19-0087

Dear Supervisors and Permit Sonoma,

As you are well aware we have been continually attacked and harassed by the members of No Pot On Purvine. Last week they launched a false claim of code enforcement violations against our property and business at 334 Purvine Rd.

When we learned of these claims we immediately reached out to Tim Ricard to coordinate a site walk by Code Enforcement and the Ag Commissioners Dept to come onto our property. We were contacted by Tyra Harrington several days later and informed that she had received a list of complaints from the No Pot on Purvine group. We did not hesitate to invite her and her team onto the property breaking with normal protocol for this type of inspection.

None of the claims of violations against us where substantiated by the inspectors. We had not been growing commercial cannabis, we did not build a greenhouse that required a permit, we have not been renting out our mother-in-law unit as a vacation rental, we have only hosted friends and family events and a farm potato harvest party of which none met the threshold for requiring a special event permit. Finally, we have not converted our barn into a dining facility.

Now that you know what we have NOT been doing let's take a brief minute to talk about what we have been doing.

- We have been developing our land and enjoying building a farm based around a strong and resilient community.
- During the fires we opened up our property and made it a safe zone for animals that needed to be evacuated.
- We hosted a neighbor day event which brought 30-40 of our neighbors together to learn about our proposed cannabis farm and learn about our operations.
- We have opened up or land for charities to use.
- We have built a 5-acre vegetable farm to engage and support the Sonoma county farm community.
- Through our large network of chefs and restaurant in the Bay Area we have been promoting Sonoma County specialty food and farm products.

We love Sonoma County, the people, the food the wine and the ability to apply for a cannabis cultivation permit.

We are fully committed to this process and have responded with grace and poise throughout this entire process to the attacks from a small group of angry neighbors. We have done everything asked of us by the county, promptly and thoroughly.

Thank you for your time and consideration, I look forward to hearing from you. Sam Magruder, applicant

Crystal Acker
Project Planner
County of Sonoma
Permit and Resource Management Department
2550 Venture Avenue
Santa Rosa, CA 95403-2829

Crystal,

I wanted to reach out and inform you of the latest with regard to our efforts to communicate and share knowledge with community groups such as <u>No Pot On Purvine</u>.

Sanjay Bagai and his wife Phoebe Lang, who reside at 105 Purvine Rd in Petaluma, have been intensifying their attacks on our team, our partners, and others that have nothing to do with our proposed permit, and I wanted to make you aware that the behavior has escalated to more individuals and taken on a threatening tone.

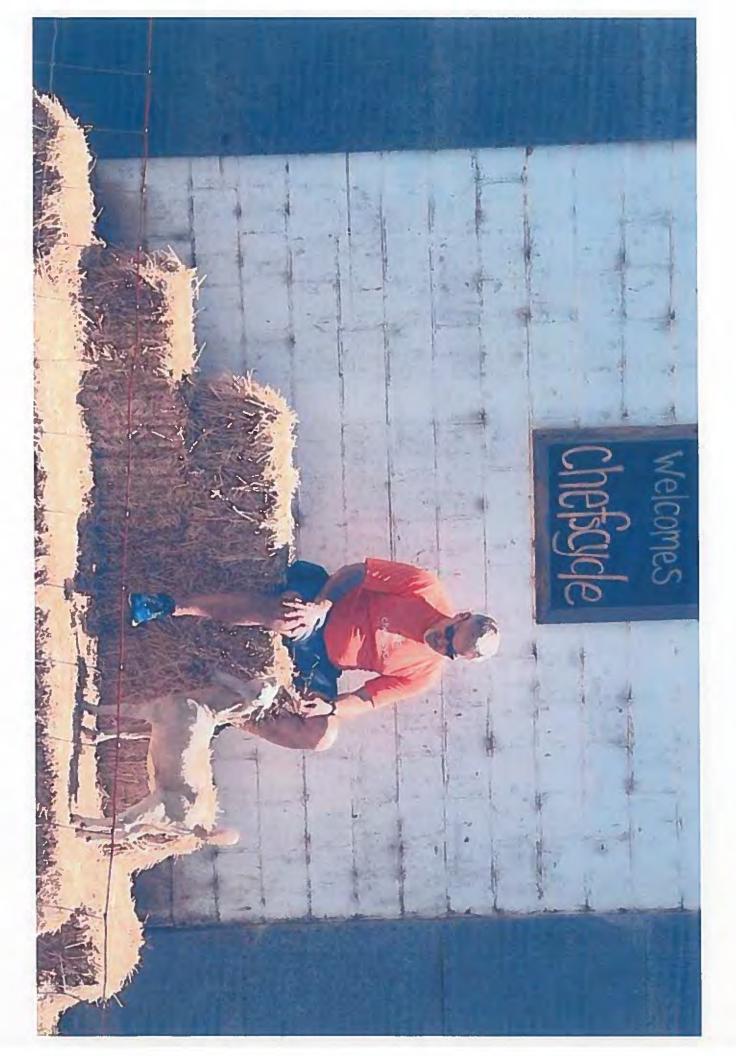
We have no problem having peaceful and mature conversations, and respect the opinions of community members, though the rhetoric has now reached a concerning level and it feels important to make you and the commissioners aware should you be envisioning something different.

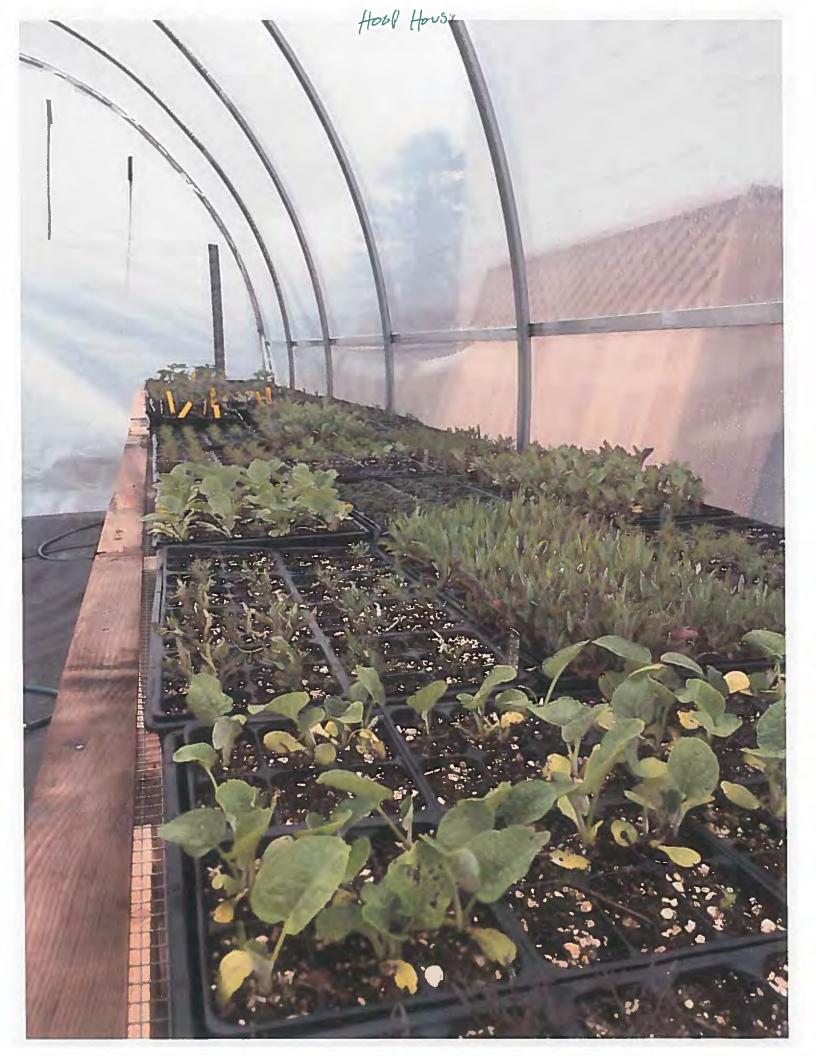
Sanjay and Phoebe have always been verbal opponents of Petaluma Hills Farm and despite our many attempts to explain our approach to this business, they have declined civil discourse. However, Sanjay's negative and intimidating campaigning has only increased, and while they paint themselves as victims it could be argued that we are the ones being victimized. His outreach includes harassing and threatening communications in the form of texts, voicemails, emails and social media posts.

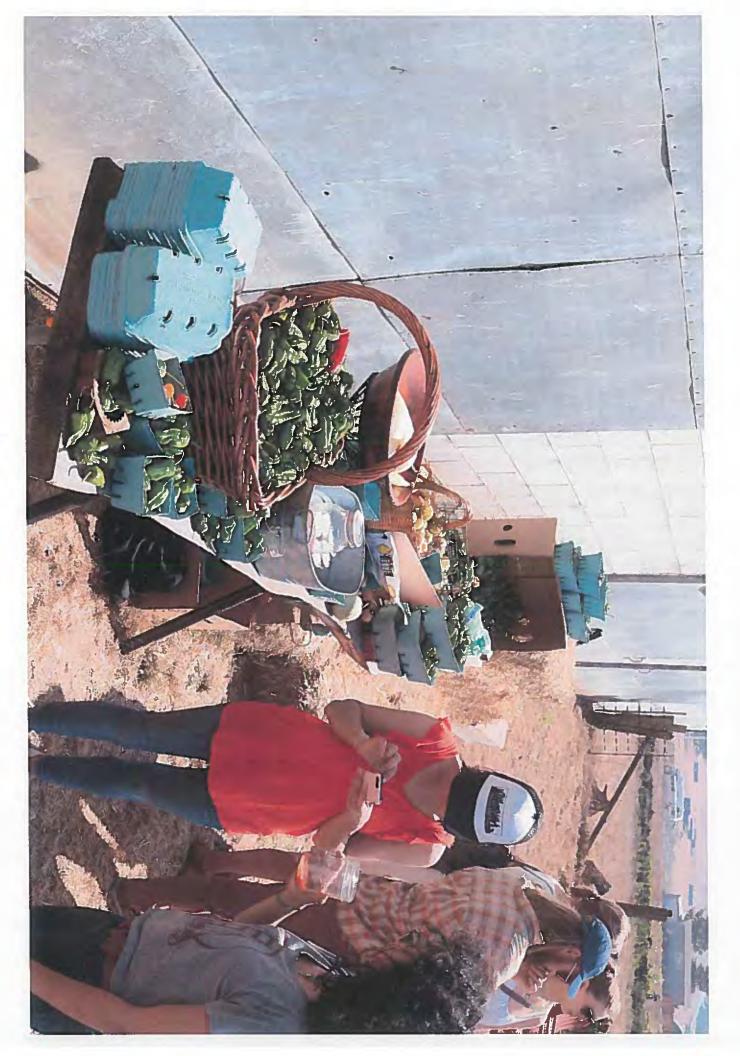
As evidence of what we are dealing with, please listen to the attached voicemail sent to someone at a non-profit and referring to Sonoma Hills Farm (which, as you know, is NOT a cannabis farm; we have applied for a permit). This partner, who was hosting a charitable bike ride to fight child hunger, was advised to notify the Sheriff's office for fear of their participants' safety.

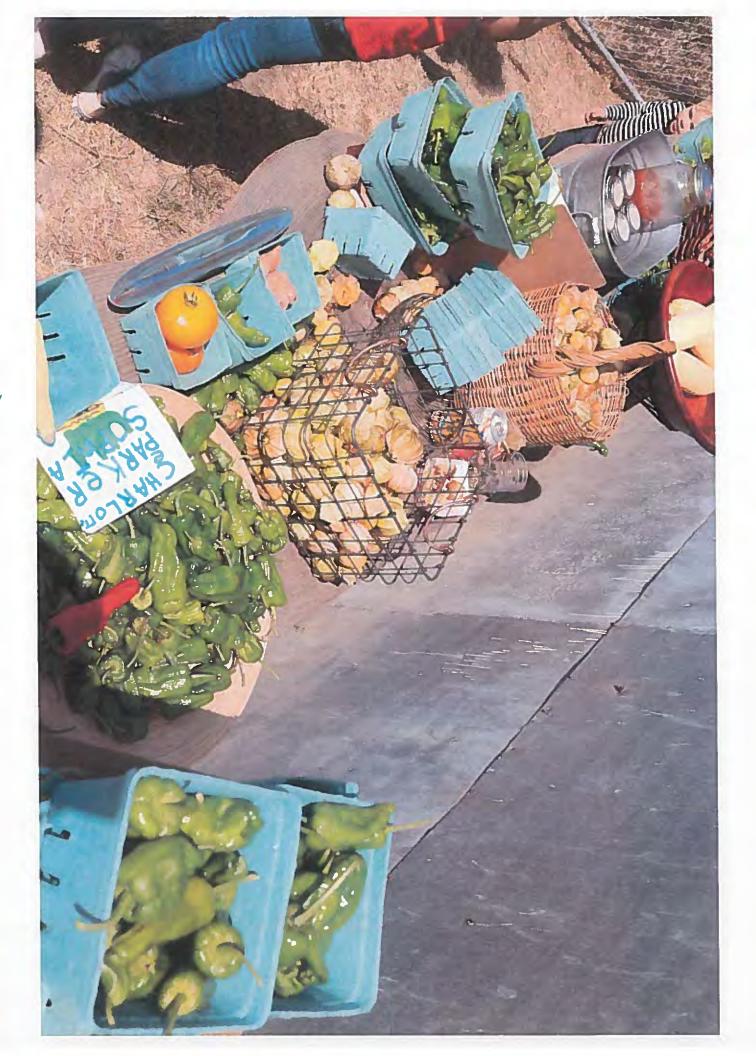
Again, we have no problem continuing the conversation, but if the unfortunate behavior from members of this group continues we will not put ourselves in harm's way.

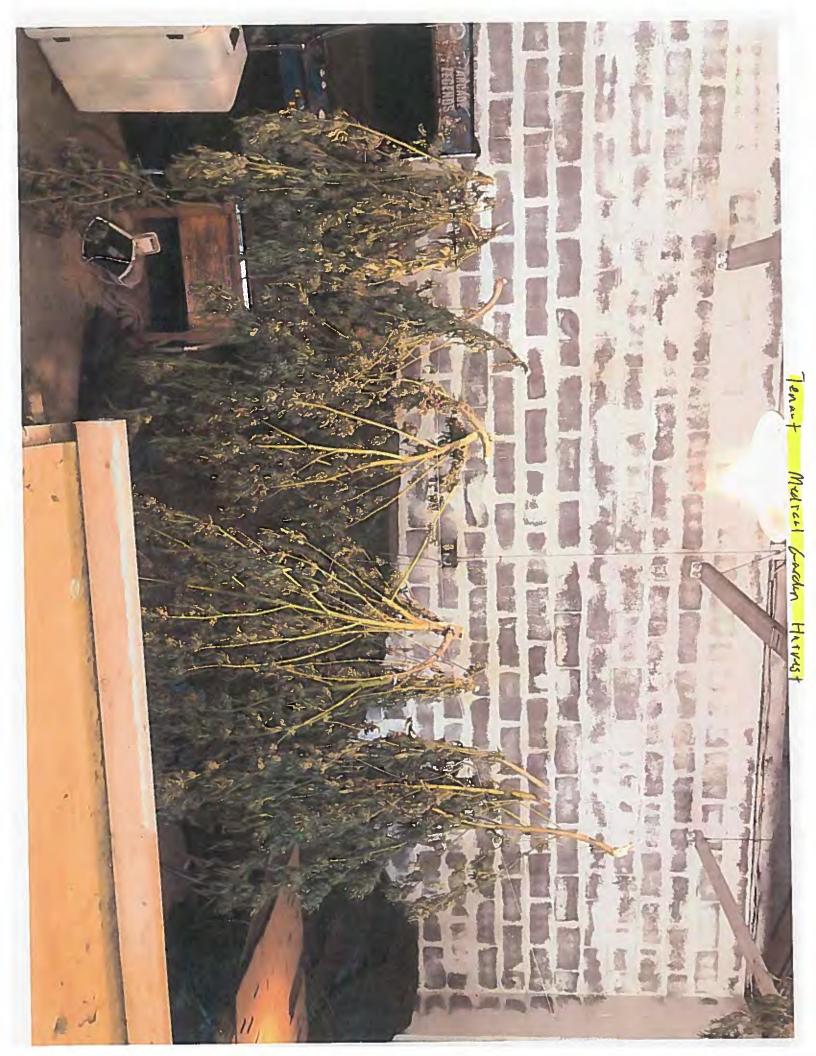
Thank you for your attention to this matter.
Sam Magruder
COO Petaluma Hills Farm
334purvine.com











Harrasant by No Pot on Provint & Songa Bagin Juring Chafs Cycle

Sonoma Hills Farm (SHF) offered to host a stop on No Kid Hungry's Chef Cycle ride, an annual fundraiser held throughout Sonoma County featuring chefs across the country who ride in support of feeding kids in need.

I was the liaison between No Kid Hungry and Sonoma Hills Farm, coordinating the two days that riders would visit SHF as a rest stop on their rides on May 15 and May 17, 2018.

On the first day of the ride, May 15th, I was contacted by phone midday by Adele Nelson, director of Chefs Cycle. She had informed me she received a voice mail from a person named Sanjay stating he was going to call the media if they did not stop the participating riders from coming onto the Sonoma Hills Farm property as it is an illegal pot farm whose owners were known criminals. She forwarded me the transcription of the voicemail.

From: +15105995272

Date: May 15, 2018 at 12:20:06 PM MST

To: "In the latest and the latest an

Subject: Voice Mail (1 minute and 19 seconds)

Hi my name is Sanjay Bugae and I believe that you guys are doing a bike ride. Um it's actually going right by my property and one of your stops on 334 providing Rd. Is a illegal pot farm they grow cannabis? And they are involved in a very, very seriously vacation and the owners are known criminal. No um we are going to be calling the press on you and have them here for you, waiting tomorrow. Um just so that you know, I think your cause is Noble. But I don't think you guys are doing a research well enough. My name is number is 51059952720. Call me when the next one hour and tell me it's relocated. We will be blasting this all over social media. We are in a fight for our lives to keep illegal pot farms from California. And here you are endorsing an illegal Park farm, um that is not even being license. In AA an using the excuse of a raising money for hungry children and marijuana. What's going? What's going wrong with you guys?

You received a voice mail from+1 510-599-5272.

Afterward, I was introduced to Jenny Dirksen of the No Kid Hungry communications team. Jenny and I discussed the accusations and I explained that Sanjay was a neighbor who seemingly had an issue with Petaluma Hills Farm permit filing. Next, I received an email on Thursday morning stating that Sanjay had left a threatening voicemail with another colleague located in the Washington DC area. (VM was forwarded - see file for reference).

From:

Sent: Thursday, May 17, 2018 5:37 AM

Subject: Update To: Carm Lyman

Good morning Carm,

One update - Sanjay sent threatening (and foul mouthed) voicemail and text to a colleague of ours. I suspect he found her number on an old press release.

I don't think we'll take any action here but will keep you in the loop.

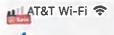
Thanks, JZD

sent with unreliable service and poor aim.

Transcribed voicemail left for Laura Washburn of No Kid Hungry:

So you're going to fucking ride,...into a pot, cannabis, ganja, ...God damn pot farm in spite of the resistance of five hundred thousand people in Sonoma County to save hungry, starving children in America. You are the biggest fucking joke...in America! ONE bicycle goes in there, we will have photographs in every major newspaper in the fucking country. You COW.

Text messages sent to forwarded to me by her colleague,







+1 (510) 599-5272

РІПК, Kacnel Bilson, SE Cupp, Sara Michelle Gellar, Skai Jackson

Resteraunts endorsing this organization: Dennys, Chruch's, El Pollo Loco, Jack in the Box, Nodles, Shake Shack, Habit, Arbys, CITI, Walmart, Amazon, Kellogs, Sysco

PRESS RELEASE

What does stopping the epidemic of little children dying

PRESS RELEASE



What does stopping the epidemic of little children dying of hunger in America and Marijuana have in common? They have a charitable organization...

Today 12 35 AM

You are a despicable human being























Crystal Acker

From:

Sanjay Bagai <sanjay.bagai@gmail.com>

Sent:

October 26, 2017 11:56 AM

To:

Crystal Acker

Subject: Attachments: Fwd: Animal Rescue email to Crystal 2017-10-26 (1).jpg; 2017-10-26 (2).jpg

URGENT: File UPC17-00200 (334 Purvine Rd. in Petaluma)

Ms. Crystal Acker,

I am writing to you again in response to file UPC17-00200, the proposed cannabis development at <u>334 Purvine</u> Rd, and the animal rescue they are currently operating on the property.

I live at 105 Purvine Rd and noticed a staunch increase in traffic and animals traveling down Purvine Rd. Upon inquiring, I was informed that this increase in traffic is due to an animal rescue that they have headquartered, and are currently operating, on the property.

I was not made aware of their intent to operate an animal rescue by either the owners or the County; this fact is concerning. Their official Facebook page identifies their organization as being called <u>The Animal Emergency Evacuation Coordinators Coalition</u>. Attached to this email are photographs from the operation's Facebook page (taken today), which indisputably identifies their rescue as being located at <u>334 Purvine Rd</u>.

Doesn't this type of operation need a permit from the County? Since this organization is already established on the property, why was it not reflected in their cannabis permit application (File UPC17-00200)? This animal rescue raises many of the same concerns I mentioned in my previous emails, with respect to groundwater contamination, increased traffic, safety and waste runoff.

Additionally, last week it turns out they have three dead animals in their operation, is there any oversight as to how these rescue shelters are managed?

Please send me any information you have on file regarding their animal rescue permit, if applicable.

I look forward to your response,

Sanjay 510 599 5272 sanjay.bagai@gmail.com www.zequus.com

Crystal Acker

From:

Phoebe Lang <phoebehlang@gmail.com>

Sent:

October 26, 2017 12:20 PM

To:

Crystal Acker

Subject: Attachments: Fwd: Animal Rescue email to Crystal 2017-10-26 (1).jpg; 2017-10-26 (2).jpg

URGENT: File UPC17-00200 (334 Purvine Rd. in Petaluma)

Ms. Crystal Acker,

I am writing to you in response to file UPC17-00200, the proposed cannabis development at <u>334 Purvine Rd</u>, and the animal rescue they are currently operating on the property.

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I was not made aware of their intent to operate an animal rescue by either the owners or the County; this fact is concerning. Their official Facebook page identifies their organization as being called <u>The Animal Emergency Evacuation Coordinators Coalition</u>. Attached to this email are photographs from the operation's Facebook page (taken today), which indisputably identifies their rescue as being located at <u>334 Purvine Rd</u>.

Doesn't this type of operation need a permit from the County? Since this organization is already established on the property, why was it not reflected in their cannabis permit application (File UPC17-00200)? This animal rescue raises many of the same concerns with respect to groundwater contamination, increased traffic, safety and waste runoff that I have around their cannabis use permit application.

Please send me any information you have on file regarding their animal rescue permit, if applicable.

I look forward to your response,

Phoebe Lang

Phoebe Lang
phoebehlang@gmail.com
415 601 5547
105 Purvine Rd
Petaluma CA 94952

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EXHIBIT D

Odor Sources
Lin et al. 2006

United States Department of Agriculture, Natural Resources Conservation Service (USDA NRCS). March 2007.

USDA NRCS. March 2014.



Agriculture Ecosystems & Environment

Agriculture, Ecosystems and Environment 116 (2006) 263-272

www.elsevier.com/locate/agee

Influence of windbreaks on livestock odour dispersion plume in the field

X.-J. Lin^a, Suzelle Barrington^{a,*}, J. Nicell^b, D. Choinière^c, A. Vézina^d

^a Faculty of Agricultural and Environmental Sciences, Macdonald Campus of McGill University, Bioresource Engineering, 21 111 Lakeshore, Ste Anne de Bellevue, Que., Canada H9X 3V9

^b Faculty of Civil Engineering and Applied Mechanics, McGill University, 817 Sherbrooke Street West, Montréal, Que., Canada H3A 2K7

^c Consumaj Inc., 3272 Boulevard Laframboise, St. Hyacinthe, Que., Canada J2S 4Z6 ^d Institut de Technologie Agricole de LaPocatière, 401 rue Poiré, LaPocatière, Que., Canada G0R 1Z0

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Abstract

Windbreaks are believed to help disperse odours emitted by livestock facilities. The objective of the project was to measure the effect of windbreaks on the size and intensity of odour dispersion plumes developed in the field when subjected to a point odour source. Comparisons were made for odour plumes observed with and without windbreaks, and with windbreaks exposed to different conditions. Besides a control site without windbreak, four windbreak sites were selected, two of which had one row of deciduous trees while the other two had one row of coniferous trees. Odour dispersion plumes were measured 6 times on the control site and 33 times on the windbreak sites. Each time, an odour generator was used to produce a controllable level of odour emission. Three groups of four trained panellists measured the size and intensity of the odour plume developing in the field downwind from the odour generator. Using a forced choice dynamic olfactometer, all 12 panellists were calibrated every test day and the group's field odour intensity perception was correlated to odour concentrations. Windbreaks were found to have an effect on odour dispersion. This effect was more pronounced when the windbreak was dense (lower optical porosity) and consisted of coniferous trees. Moreover, odour dispersion was improved when the source was located 15 m upwind from the windbreak, rather than 60 m. When temperatures were above 15 °C, odours were dispersed over a shorter distance, likely because of added convective effects. Wind speed was found to have a limited effect on the size and intensity of the odour plume while wind direction perpendicular to the windbreak reduced the size of the odour plume but not the trapping of odours on the leeward side of the windbreak. In general, windbreaks can improve odour dispersion, but a better study of their performance is required through modeling.

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1. Introduction

Odours released from livestock facilities are dispersed into the atmosphere while being transported to nearby dwellings and communities. Insufficient dispersion of odours leads to nuisance and law suits (Tyndall and Collettii, 2000; Brant and Elliott, 2002). To prevent such nuisance, the common practice is to leave sufficient setback

distance between the livestock facilities and the neighbours, thus increasing the probability of atmospheric dilution. To further increase this probably, natural windbreaks have been recommended around livestock facilities (Tyndall and Collettii, 2000; Leuty, 2003, 2004).

Windbreaks are well known to act as barriers reducing and redirecting the wind, and thus theoretically have been presumed to help dilute odours. However, the odour dispersion capability of windbreaks and the ideal design of the windbreak shelter (size, location and distance from the livestock facility) still need investigation. In the past,

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windbreak research has focused on the reduction of wind velocity and turbulence, the control of snow and sand accumulation and the reduction in pesticide drifting. Windbreaks have also been observed to increase crop yield and protect animals and buildings, reduce wind erosion and noise and improve aesthetics (Van Eimern et al., 1964; Plate, 1971; Heisler and Dewalle, 1988; Wang and Takle, 1997; Ucar and Hall, 2001; Dierickx et al., 2002; Guan et al., 2003; Vigiak et al., 2003; Wilson and Yee, 2003).

Field measurement, wind tunnel test and computational fluid dynamic (CFD) simulation are the three main methods used to study windbreaks (Patton et al., 1998; Lee and Kim, 1999; Boldes et al., 2001). Research pertaining to livestock odour dispersion has focused on the measurement of odours emitted from barns, manure storage facilities and fields used for manure spreading (Zhu et al., 2000; Edeogn et al., 2001; Guo et al., 2003). However, field odour dispersion around windbreaks is less commonly reported.

Livestock and poultry producers in North America have installed windbreak walls near the outlets of the fans venting their livestock shelters to help reduce dust and odours emissions. The effect of such walls was studied by means of smoke emitters and simulated using a Gaussian model (Bottcher et al., 2000, 2001). The windbreak walls were found to vertically divert the odours and dust from the exhaust fans and promote mixing of the odourous dusty air with the wind flowing over the building, but not to be as effective as tall stacks. However, field measurements are still

needed to determine the effectiveness of porous windbreaks for odour dispersion.

The objective of this project was to conduct a preliminary investigation to observe the effect of windbreaks on odour dispersion produced from a point source. Thus, the project investigated the size and intensity (odour concentration) of odour dispersion plumes created in the absence and presence of windbreaks in the field. An odour generator was used to produce a controlled point odour source to conduct the experiment away from any interfering sources. Three teams of four trained panellists measured the odour plumes. The size of the measured plumes was visually compared to evaluate the windbreak effect.

2. Materials and methods

2.1. Sites and windbreaks

For this field experiment, four uniform single row windbreaks were selected and these were located at least 5 km from any livestock operation to eliminate interferences (Fig. 1). The porosity of each windbreak was optically evaluated by measuring the percentage of open surface visible through the windbreak (Heisler and Dewalle, 1988; Guan et al., 2003).

The four windbreaks were selected in such a way as to offer different conditions. The optical porosity of the



Site 1 one raw of mature poplars

Site 2 mixed mature deciduous trees



Site 3 one row of conifers

Site 4 mature conifers

Fig. 1. Experimental windbreaks on all four sites, also illustrating the odour generator mounted in the box of a pick up truck.

Table 1
Experimental windbreak found on each site

Description	Site							
	1	2	3	4				
	Poplar ^a	Mixed mature deciduous ^a	Conifers ^a	Conifers ^a				
Windbreak								
Length (m)	2100	1050	405	380				
Height (m)	18.3	9.2	7.6	15.2				
Depth (m)		7		6				
Optical porosity (%)	55	35	55	35				
Porosity at the base (%)	70	30	70	40				
Location	Sherrington	St. Chrysostome	St. Amable	St. Charles				

Note: All locations are located within 50 km of the Island of Montreal, Canada, in the south-west direction.

windbreaks on sites 1 and 3 was 55% compared to that of 35% for that on sites 2 and 4 (Table 1). Deciduous trees constituted the windbreaks on sites 1 and 2 while conifers constituted those of sites 3 and 4. All sites were located on farm land with a relatively flat and consistent slope of 0.1%. Tree height was the only parameter which varied among windbreaks, sites 1 and 4 offering windbreaks with a height exceeding 15 m compared to sites 2 and 3 offering windbreaks with a height under 10 m.

A control site (site 5) without windbreak was selected to also observe odour dispersion. This site consisted of relatively flat (0.1% uniform slope) land without trees or fences, where a cereal crop had been freshly harvested.

2.2. Odour generator

A mobile odour generator (Fig. 2) was used to control the emission of odours during the test, and to carry out the test away from any infrastructure capable of interfering with the results. During the tests, the odour generator was positioned upwind from the windbreak, at a distance of 15, 30 or 60 m.



Fig. 2. The mobile odour generator mounted in the box of a pick up truck.

The odour generator consisted of a 500 L tank filled with swine manure. A pump dropped the manure at the top of a vertical porous filter through which air was blown. The odour generator was found to produce 76.8 m² of air/liquid contact surface (Choinière, 2004). The contaminated air was released at a mean rate of 1.65 m³ s⁻¹. At every 30 min during the test, an air sample was collected at the outlet of the odour generator using Alinfan® bags. Using a forced choice dynamic olfactometer, the threshold dilution value of each air samples was determined in the laboratory by the same 12 trained panellists who observed the field odour plume dispersion.

The odour concentration was expressed as "odour units per cubic meter" (OU $\rm m^{-3})$ as used in Europe (CEN, 2001; Schauberger et al., 2002; Zhang et al., 2002), rather than as "odour units" (OU) as mostly used in North America. Thus, the rate of odour production, OU $\rm s^{-1}$, could be computed from the air flow of the odour generator.

2.3. Weather station

During each test, a 7.6 m high weather station tower was installed 200 m upwind from the windbreak, to avoid disturbance. A computer recorded the temperature, wind direction and wind speed every minute during the field test. The measured wind direction was used before hand to determine the range of the field odour plume and to direct panellists into the odour plume zone.

2.4. Panellists

Three groups of four $(3 \times 4 = 12)$ trained panellists were used to establish the size of odour plumes in the field. The panellists were selected by requiring them to detect n-butanol at concentrations of 20–80 ppb and to show consistency in their individual measurements (Choinière and Barrington, 1998; Edeogn et al., 2001). In the laboratory, the olfactory ability of each group of panellists was calibrated using a dynamic forced choice olfactometer. Odour intensity was established using a scale of 0–10, where

^a Tree type.

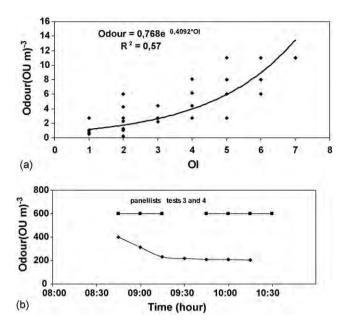


Fig. 3. (a) Relationship between odour intensity (OI) and odour concentration (Odour) for a group of panellists. (b) Odour concentration (Odour) produced by the generator during tests 3 and 4, when started at 8:30 a.m.; the panellists started to evaluate the odour plume at 8:42 a.m. and finished evaluating the second plume at 10:30 a.m., while odour samples were taken at the generator at 8:50, 9:20, 9:50 and 10:20 a.m., and the odour generator flow rate is $2.0 \, \mathrm{m}^3 \, \mathrm{s}^{-1}$.

0–2 is tolerable, 2–4 is unpleasant, 4–6 is very unpleasant, 6–8 is terrible and 8–10 is intolerable. Using the odourous air samples collected from the odour generator during the field tests at full strengths, each panellist was asked to rate the odour intensity using this scale of 0–10. Then, each panellist was used to determine the odour threshold level of each odourous sample. A relationship was thus obtained between odour intensity and odour concentration (Fig. 3a), for each group of four panellists. Thus, the odour intensity reading (0–10) of each group of panellists in the field could be translated into an odour concentration in terms of OU m⁻³.

2.5. Olfactometer

The laboratory forced choice dynamic olfactometer used in this experiment was fully automated and capable of analyzing four contaminated air samples in 20 min, using 12 panellists. The olfactometer is unique because of its level of automation and speed suitable to evaluate air samples (Choinière and Barrington, 1998).

2.6. Test procedure

Before each test, the odour generator and weather station tower were installed upwind from the windbreak and checked to be effectively working. Then, the three groups of four panellists were given a GPS to keep track of their field position and a planned route with specific measurement points. The odour generator would be turned on 15 min before the panellists would start covering their specified path to measure the odour plume (Fig. 3b). At each measurement point, the group would stop walking, removed their face masks and evaluated the odour intensity during 1 min, using a scale of 0–10. The odour intensity observed by each panellist was recorded along with their GPS position and the actual time of reading. An odour point was defined as a point in the field where at least 50% (two out of four) of the panellists detected an odour. The odour intensity at an odour reading point was the average of the four panellists' evaluation.

Following each field test, the same panellists were used to determine the odour concentration of the odour samples collected at the outlet of the odour generator. The relationship between field odour intensity readings and actual odour concentrations (OU m⁻³) was also determined at the same time, to translate the field readings into concentration (OU m⁻³) values (Choinière, 2004).

On 18 different days, 39 different tests were conducted on the four windbreak sites and the single control site (Table 2). A test consisted in the measurement of the odour plume by the panellists on a given site with the odour generator located at a specific distance upwind from the plume area or the windbreak. On the control site, six repeated tests were conducted on four different days. Then, 33 tests were conducted on the windbreak sites. A total of 12, 11 and 9 tests were conducted with the odour generator located 15, 30 and 60 m upwind from the windbreak, respectively. One test was conducted with the odour generator located 49 m from the windbreak, on site 3. Tests on sites 1–3 and on the control site were conducted in late August and early September 2003 while tests on site 4 were conducted in December 2003, because of delays in finding a suitable windbreak site.

2.7. Standardizing the resulting odour plumes

During each test, the odour generator emitted a different odour concentration (OU m⁻³) because of variations in temperature and in the source of manure used to generate the odour. Also, the odour level emitted was always high initially, and dropped with time to reach a steady level (Fig. 3b). Thus, all odour measurements were normalized as follows to be able to compare the results. A curve of odour emission level with time was obtained from the analysis of the odourous air samples collected from the odour generator every 30 min. For each test, the odour concentration reported at a point by each group of panellists, at a given period in time, was divided by the odour concentration released by the generator at that time and then multiplied by average odour concentration calculated for all 39 tests. The average odour concentration measured at the odour generator was 471.6 OU m⁻³.

Also, the wind direction changed with respect to the windbreak, during the test and from one test and site to the

Table 2
Test conditions

Test number	Site	Date (2003)	Test conditions						
			OG (m)	OE (OU s ⁻¹)	WS $(m s^{-1})$	Angle (°)	<i>T</i> (°C)	AS	
(a) Test conditio	ns for sites 1								
1	1	August 29	15	621	6.4	90	19	В	
2	1	August 29	30	760	6.0	90	20	D	
3	1	September 2	30	859	2.5	50	17	C	
4	1	September 2	60	551	2.5	50	20	C	
5	2	September 3	30	1373	3.0	90	21	В	
6	2	September 3	60	492	4.4	90	23	C	
7	2	September 5	15	578	4.7	40	18	D	
8	2	September 5	30	585	4.2	40	19	D	
9	2	September 8	15	214	1.0	60	22	В	
10	2	September 8	60	218	1.1	70	20	В	
11	2	September 10	15	5360	1.2	30	22	C	
12	2	September 10	30	1096	2.7	20	27	D	
13	2	September 12	15	559	1.2	50	23	В	
14	2	September 12	60	294	1.0	40	26	В	
15	2	September 15	15	744	5.1	90	28	D	
16	2	September 15	30	745	1.5	90	23	D	
17	2	September 18	15	1879	1.5	40	24	C	
18	2	September 18	60	13052	1.4	50	21	В	
19	2	September 18	60	846	2.2	60	26	В	
(b) Test conditio	ons for sites 3	, 4 and 5 and for sites	1 and 2 with a w	vind angle of 0°					
20	3	September 29	15	318	1.8	80	13	C	
21	3	September 29	49	368	1.7	70	14	В	
22	4	October 12	15	1339	4.1	60	-2	D	
23	4	October 12	30	690	3.5	60	-4	D	
24	4	October 12	60	208	2.6	50	-4	D	
25	4	December 10	15	166	1.3	70	-2	D	
26	4	December 10	15	148	1.9	70	-2	D	
27	4	December 10	30	101	1.7	60	-2	D	
28	4	December 13	30	111	0.0	60	-8	D	
29	4	December 13	60	175	2.1	50	-6	D	
30	4	December 13	60	79	1.4	50	-9	D	
31	4	December 14	15	205	3.1	70	-8	D	
32	4	December 14	30	394	3.3	60	-8	D	
33	4	December 14	30	350	3.0	80	-8	D	
34	2	September 9	197	166	1.2	0	18	C	
35	4	September 12	191	102	0.3	57	-2	В	
36	4	September 12	318	99	0.4	0	-3	C	
37	5	August 21	NW	766	4.1	NW	28	C	
38	5	August 21	NW	480	3.6	NW	26	С	
39	5	August 22	NW	310	6.1	NW	26	D	

Note: NW—no windbreak; OG—odour generator distance upwind from the windbreak; OE—average odour emission during the test; WS—average wind speed; angle—angle between the windbreak and the wind, 90° being perpendicular; *T*—average temperature measured during the test; AS—Pasquill–Grifford atmospheric stability condition, where B and C are unstable classes and D is a stable class.

other, which changed the shape of the odour dispersion plume. For the purpose of relating all measured odour plumes, the position of each measured point was standardized as follows. For each 10 min period during which the wind direction and speed were averaged, the windbreak was assumed to stand perpendicular to the wind direction and new *x* and *y* coordinates were computed for each odour point observed. The *x* and *y* coordinates were defined perpendicular and parallel to the windbreak, respectively, with the odour generator standing at the origin (Choinière, 2004). Using these newly computed coordinates for each point along with the normalized odour concentration measured, a standardized odour plume was constructed.

3. Results and discussion

The measured odour plumes, illustrated in Figs. 4–10, demonstrated several peaks separated by areas with no measurable odour concentration, reflecting the variability of odour dispersion in the field. Nevertheless, if these peak values are plotted against distance, there is a drop in odour concentration with distance downwind from the source. This distance is most likely affected by the windbreak, its porosity and tree type and height, by the location of the odour generator and the ambient climatic conditions. The following is a general discussion on the impact of each of these factors. For each parameter, the cases or case used for

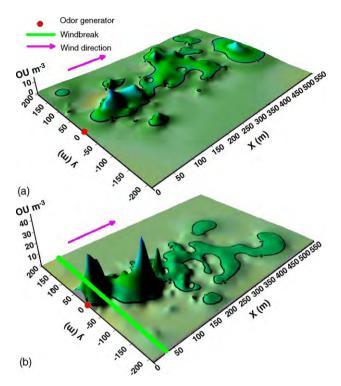


Fig. 4. Odour plumes on sites 2 and 5: (a) without windbreak (tests 37, 38 and 39) and (b) with windbreak on the site 2 (tests 5, 8, 12 and 16). An odour concentration of 2 Ou $\,\mathrm{m}^{-3}$ is used to draw the final contour of the odourous zones.

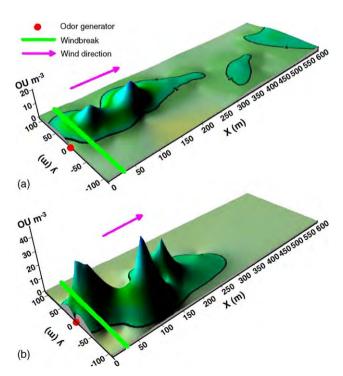


Fig. 5. Effect of windbreak optical porosity on odour plume: (a) windbreak porosity of 55% on site 1 (test 2) and (b) windbreak porosity of 35% on site 2 (test 16). The odour generator is 30 m away from the windbreak. An odour concentration of 2 Ou $\rm m^{-3}$ is used to draw the final contour of the odourous zone.

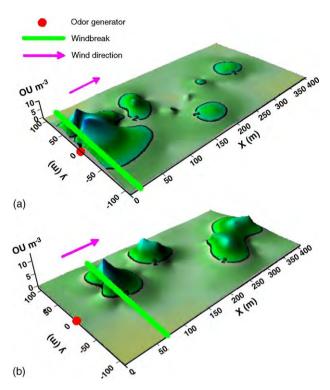


Fig. 6. Effect on odour plume of odour generator distance from the windbreak for site 2: (a) odour generator 15 m away (test 13) and (b) odour generator 60 m away (test 14). An odour concentration of 2 Ou m⁻³ is used to draw the final contour of the odourous zone.

the comparison are as similar as possible, considering the limitations in the variability of the tests, despite the 39 cases measured. The only factor which could not be tested is that of tree height. The size of each plume is limited by a $2~\rm OU~m^{-3}$ contour line.

3.1. Effect of the presence of a windbreak

Fig. 4 illustrates the average odour plume observed without (tests 37, 38 and 39 on site 5) and with (tests 5, 8, 12 and 16 on site 2) a windbreak where the odour generator was located 30 m upwind. The average air temperature was 26.4 and 22.6 °C, respectively, for the odour plume without and with a windbreak. On site 2, the wind direction ranged between 20° and 90° with respect to the windbreak, 90° being perpendicular. Both odour plumes were observed in late August and early September under similar environmental conditions.

By contrast, the plumes developed without the windbreak reached a much longer standardized distance downwind, compared to that developed with the windbreak. With the windbreak, a normalized peak odour concentration of 3.0 OU m^{-3} was measured at x = 477 m and y = -98 m, compared to that of 3.7 OU m^{-3} measured without a windbreak at x = 520 m (Table 3). In the absence of the windbreak, a maximum odour peak of 16 OU m^{-3} occurred at x = 69 m while that of the windbreak measured 50 OU m^{-3} at x = 117 m (Table 3). Comparing Fig. 4a

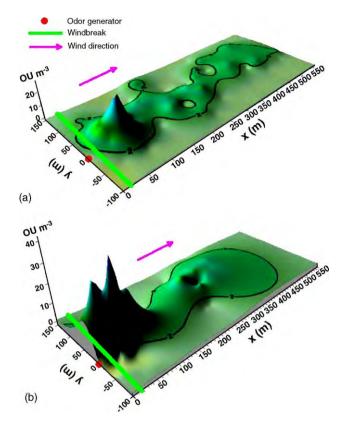


Fig. 7. Effect of tree type on odour plume: (a) site 1 with deciduous trees (test 1) and (b) site 3 with coniferous trees (test 20). The odour generator is 15 m away from the windbreak. An odour concentration of 2 Ou m $^{-3}$ is used to draw the final contour of the odourous zone.

and b, the windbreak is observed to concentrate or trap the odours on its leeward position before dispersing them further on.

3.2. Effect of windbreak optical porosity

Fig. 5 illustrates the odour plume observed using a windbreak with an optical porosity of 55% (test 2 on site 1) and 35% (test 16 on site 2). In both cases, the odour generator was located 30 m upwind from the windbreaks, the wind direction was mostly perpendicular to the windbreaks, and the air temperature was 20 and 23 °C, respectively.

Despite the greater height of its trees, the more open windbreak (55% optical porosity) was found to produce a longer odour plume covering 150 m in width × 600 m in length, compared to that of the 35% porosity windbreak covering also 150 m in width but only 300 m in length. The furthest standardized odour peak concentrations for the 55 and 35% optical porosity windbreaks had values of 3.2 and 4.0 OU m⁻³ at x = 601 and 281 m, respectively. However, the 55% optical porosity windbreak produced a maximum odour peak of 22 OU m⁻³ at x = 138 m while that with a 35% optical porosity produced a much higher maximum odour peak of 50 OU m⁻³ at x = 117 m

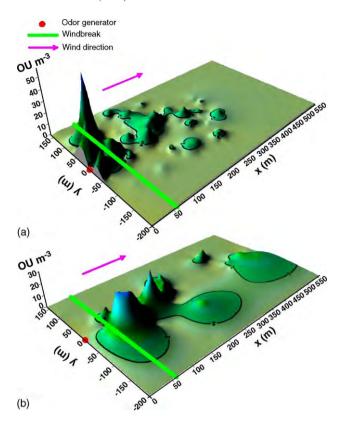


Fig. 8. Effect of air temperature on odour plume: (a) air temperature above $20~^{\circ}\text{C}$ for site 2 (tests 6, 10, 18 and 19) and (b) air temperature below $0~^{\circ}\text{C}$ for site 4 (tests 29 and 30). The odour generator is 60 m away from the windbreak. An odour concentration of 2 Ou m $^{-3}$ is used to draw the final contour of the odourous zone.

(Table 3). Again, the smaller odour plume corresponded to a more intense odour trapping in the leeward position of the windbreak.

The more open windbreak was found to produce an odour plume which was similar to that obtained without a windbreak, likely because a porous windbreak produces less turbulent energy and therefore less odour mixing and odour dilution, compared to a denser windbreak. Therefore, a denser windbreak will more effectively disperse odours.

3.3. Effect of odour generator position upwind from the windbreak

Fig. 6 compares the odour plume observed with the odour generator located 15 and 60 m upwind from the site 2 windbreak (tests 13 and 14). An average wind direction of 50° and 40° and an air temperature of 23 and 26 °C were measured for each respective test.

For the 15 and 60 m position, the maximum peak odour concentrations were 15 and 14 OU m⁻³ at x = 19 and 65 m, respectively (Table 3). Also and downwind from the windbreak, the 60 m position seemed to produce a set of secondary odour peaks of higher intensity, compared to the 15 m position. Thus, the closer the windbreak is positioned with respect to the source, the better the odour is trapped and

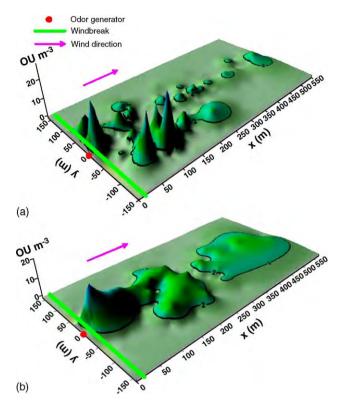


Fig. 9. Effect of wind speed on the odour plume for site 2: (a) wind speed of 1.2 m s $^{-1}$ (tests 9, 11, 13 and 17) and (b) wind speed of 4.9 m s $^{-1}$ (tests 7 and 15). The odour generator is 15 m away from the windbreak. An odour concentration of 2 Ou m $^{-3}$ is used to draw the final contour of the odourous zone.

dispersed. With the odour source at 60 m from the windbreak, the odour is likely dispersed to a certain extent before reaching the windbreak and peaks of lower intensities are therefore trapped on the leeward side. It is therefore preferable to locate the windbreak closer to the source, for better entrapment and dispersion.

3.4. Effect of tree species

Fig. 7 illustrates the odour plume observed in the presence of poplars (test 1 on site 1) with a height of 18 m and conifers (test 20 on site 3) with a height of 9 m, where both windbreaks had a porosity of 55%. In both cases, the odour generator was located 15 m upwind from the windbreak and the temperature averaged 19 and 13 °C, respectively, with wind directions of 90° and 80°. Conditions of wind speed were nevertheless different, averaging 6.4 and $1.8~{\rm m~s^{-1}}$, respectively.

The conifer windbreak trapped more odours on its leeward side, compared to the poplar windbreak, despite the lower wind speed likely to induce less mixing. The peak odour concentrations were 30 and 47 OU m⁻³ at x = 78 and 52 m, for the poplar and conifer windbreaks, respectively (Table 3). The contour line of 2 OU m⁻³ also showed a shorter odour plume of 450 m for the coniferous windbreak compared to 500 m for the poplar windbreak.

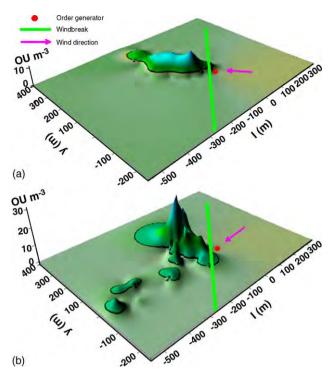


Fig. 10. Effect of wind direction on odour plume: (a) wind direction of 90° to the windbreak (test 15) and (b) wind direction of 40° to the windbreak (test 17). In this coordinate system, positive x- and y-axes point to east and north, respectively, and wind direction has not been normalized. The odour generator is 15 m away from the windbreak, and the respective wind velocities are 5.1 and 1.5 m s⁻¹. An odour concentration of 2 Ou m⁻³ is used to draw the final contour of the odourous zone.

Despite its shorter height and conditions of lower wind speed, the conifer windbreak produced a shorter odour plume compared to the poplar windbreak. Likely, conifers offer more air flow resistance, because of their stronger and less flexible branches. Thus, conifers would have a lower aerodynamic porosity, compared to poplars, for the same measured optical porosity.

3.5. Effect of air temperature

Air temperature impacts the odour plume development as a result of convection created by the different air and ground temperatures. Fig. 8 compares the odour plume observed in early September (tests 6, 10, 18 and 19 on site 2) with a deciduous windbreak, to that observed in December (tests 29 and 30 on site 4) with a coniferous windbreak. In both cases, the odour generator was located 60 m from the windbreak, the windbreak optical porosity was 35%, and the wind velocity averaged 2.3 and 2.0 m s⁻¹ for the summer and winter conditions, respectively, while the average temperature was 22.5 and -7.5 °C, respectively.

The odour plume measured in September was much shorter (350 m) compared to that measured in December (over 500 m), despite the greater height of the coniferous windbreak and the fact that its tree type may better trap odours, as observed earlier. The standardized maximum

Table 3
Tests selected to compare windbreak performance

Comparison	Figure	Condition Test no	Test no.	MOP			FOP		
				x (m)	y (m)	$OU m^{-3}$	<i>x</i> (m)	y (m)	${ m OU~m^{-3}}$
Windbreak presence	Fig. 4	With	37, 38, 39	69	19	16	520	0	3.7
		Without	5, 8, 12, 16	117	-49	50	477	-98	3.8
Windbreak porosity	Fig. 5	55%	2	138	8	22	601	30	3.2
		35%	16	117	-49	50	281	-64	4.0
Odour generator distance	Fig. 6	15 m	13	19	32	15	326	0	3.7
		60 m	14	65	22	14	394	0	6.1
Tree type	Fig. 7	Deciduous	1	78	15	30	547	0	2.5
		Conifer	20	52	5	47	345	76	6.6
Temperature	Fig. 8	23.2 °C	6, 10, 14, 18, 19	52	63	68	336	-69	2.1
-		−6.1 °C	29, 30	91	-43	31	519	-39	6.8
Wind speed	Fig. 9	1.5 m s^{-1}	9, 11, 13, 17	116	-97	34	499	0	6.8
•		4.9 m s^{-1}	7, 15	27	45	22	530	-43	4.0
Wind direction	Fig. 10	90° angle	15	-54	64	11	-115	297	3.1
	=	40° angle	17	-112	102	34	-499	-20	6.8

Note: MOP—maximum odour peak; FOP—odour peak measured further away from the source.

peak odour concentrations were 68 and 31 OU m $^{-3}$ at x = 52 and 91 m, respectively (Table 3), indicating better odour trapping under warmer temperatures. Therefore, the warmer environmental conditions likely resulted in more air turbulence because of the higher air viscosity, and in better odour dispersion as a result of greater convective forces, compared to cooler winter conditions where the odour source seemed to remain at ground level. Indeed, the summer tests were conducted under more unstable conditions (classes B and C) compared to the tests conducted during the winter (class D), as indicated in Table 2.

3.6. Effect of wind speed

Fig. 9 illustrates the odour plume observed with an average wind speed of 1.2 m s⁻¹ (tests 9, 11, 13 and 17 on site 2) compared to 4.9 m s^{-1} (tests 7 and 15 on site 2). In both cases, the odour generator was located 15 m upwind from the windbreak, the wind directions were 45° and 65°, respectively, and the air temperature was 23 °C. Although the maximum peak odour concentrations were 34 and 22 OU m⁻³ at x = 116 and 27 m, respectively (Table 3), wind speed had limited effects on the size of the odour plume. The lower wind speed resulted in an odour concentration of 6.8 OU m⁻³ at x = 499 m downwind from the windbreak, compared to an odour plume reaching 4.0 OU m^{-3} at x = 530 and y = -43 m for the higher wind speed. The only difference observed, among odour plumes, is the smaller more sporadic odour zones obtained with the higher wind speed, compared to more extensive odour zones obtained with the lower wind speed.

Higher wind speeds through a windbreak were observed to create stronger turbulence (Cleugh, 1998), which is believed to further dilute and mix odours. In the present work, a limited effect was observed with higher as compared

to lower wind speeds, likely because the lower wind speed benefited from more atmospheric instability. During conditions of high wind speed, an atmospheric class stability of D (stable) was observed, while for the lower wind speed, more instable atmospheric classes of B and C were observed.

3.7. Effect of wind direction

The observed odour plumes were not standardized for wind direction, in this comparison, for the purpose of observing wind direction effect. Fig. 10 compares the odour plume observed with a 90° (test 15 on site 2) and a 40° wind (test 17 on site 2), using positive x and y coordinates pointing east and north, respectively. In both cases, the odour generator was located 15 m away from the windbreak and the air temperature was 28 and 24 °C, respectively. The respective average wind speeds of 5.1 and 1.5 m s⁻¹ definitely had an impact on odour dispersion, along with wind direction.

A higher wind direction perpendicular to the windbreak was observed to produce a shorter odour plume, reaching 300 m, compared to over 500 m for a lower wind speed at 40° to the windbreak. The odour concentrations were 3.1 and 6.8 OU m⁻³ at 318 and 499 m downwind from the odour generator, for the 90° and 40° wind directions, respectively. Interestingly enough, the 40° wind direction created an odour plume of higher intensity and width, on the leeward side of the windbreak. The higher wind speed could have masked the effect of wind direction, as the non-perpendicular wind direction was expected to provide a deeper windbreak layer against the wind and therefore a less porous windbreak. Because of the interference of wind speed, the effect of wind direction could not be properly investigated.

4. Conclusion

Field tests were conducted to observe the size and intensity of odour plumes developing in the presence and absence of windbreaks with different properties and under different climatic conditions. From a visual comparison of the plumes, the following conclusions were drawn:

- (1) Windbreaks were observed to be effective in reducing the size of the odour plume when of low optical porosity and when located close (15 m) to the source.
- (2) Conifers were found to offer more wind resistance and produce more odour dispersion, as compared to deciduous trees.
- (3) Higher temperatures favour odour dispersion, likely because of more viscous air and greater convective effects at the ground level.

The effect of wind speed and direction could not be properly evaluated because of variable conditions among tests compared. Effectively, despite the 39 field tests, the comparisons were not perfect, as more than one factor, as climate, atmospheric stability and tree properties, varied at any single time. The effectiveness of windbreaks could most likely be better compared through modeling, where all parameters can be controlled.

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United States Department of Agriculture



Plant Materials Program

USDA-NRCS National Plant Materials Center, Beltsville, MD Maryland Plant Materials Technical Note No. 1

March 2007

Windbreak Plant Species for Odor Management around Poultry Production Facilities

Introduction

The U.S. poultry industry is the world's largest producer and second largest exporter of poultry meat. U.S. consumption of poultry meat (broilers, other chicken, and turkey) is considerably higher than beef or pork. Considering overall animal production in the U.S., the total number of chickens per farm has increased considerably. This national trend of producing more chickens on fewer farms is especially evident in the Mid-Atlantic. From 1982 to 2002, while the number of broiler chicken farms decreased by 11 percent, the number of birds produced increased by 54 percent in Delaware, Maryland and Virginia (National Agricultural Statistical Service). While poultry



A windbreak will significantly improve the visual appearance of the farm and foster good neighbor relations. Photo by George Malone

producers are increasing the efficiency of their operations, Mid-Atlantic States have been losing farmland, in most cases to development. From 1997 to 2002, Maryland, Delaware and Virginia, on average, have lost 5 percent of their state's farmland. This loss of farmland totals almost 300,000 acres (National Agriculture Statistics Service). This trend of farmland loss is at a rate almost four times that of the nation as a whole. The encroachment of houses on farmland in the Mid-Atlantic, combined with the trend toward more concentrated poultry operations, points to a much greater need for vegetative buffers.

Benefits of Windbreaks/Buffers

Handling of Odor and Dust Particles

Tree and shrub buffers absorb gaseous ammonia, precipitate out dust by slowing the air speed from exhaust fans, and deflect the odor plume into the atmosphere above the buffer, all in a very cost-effective way. With odor management, the buffer becomes part of the overall management

of the farm operation. Odor from poultry houses typically travels downwind, along the ground, in a concentrated plume. By planting trees and shrubs around poultry houses farmers can disrupt the plume and mix it with the prevailing winds to dilute odor.

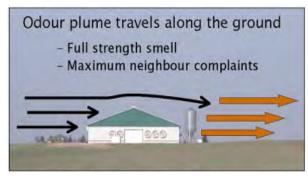
Ammonia is the gas of greatest concern to the poultry industry. Plants have the ability to absorb aerial ammonia (Yin et al., 1998). This translates into higher growth rates, as plants located in front of exhaust fans were found to have higher amounts of nitrogen and dry matter weights compared to control plants (Patterson 2005). Plant growth is increased with the right amount of ammonia; however, there is a critical threshold where too much ammonia will cause tissue necrosis, reduced growth, and greater frost sensitivity (Van deer Eerden et al 1998). During the summer, trees reduced air velocity by 99%, dust by 49% and ammonia by 46% downwind of the trees (Malone 2006). The direction of the wind strongly influenced these results; wind blowing toward the fans "increased" the efficacy of the buffer while wind blowing in the opposite direction "decreased" this efficacy (Malone 2006).

Visual and Noise Barriers

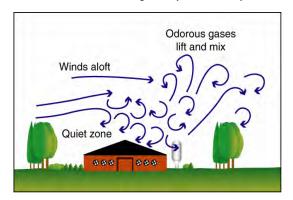
The primary benefit from plant buffers installed near the poultry production facility is the improved visual perception of the facility, but they also can reduce noise by up to 50%. This is extremely important to good neighbor relations where residential housing exists near poultry farms. These benefits are especially important in the mid-Atlantic, with its booming housing market.

Other Benefits

Windbreaks/buffers may also reduce the spread of specific infectious diseases in poultry operations by blocking, intercepting or diverting wind-borne infectious organisms away from buildings. However, use care to



Without windbreaks and without wind management the odor plumes are picked up by passing air masses and travel near the ground with little or no dilution or filtration. Diagram by Todd Leuty.



Windbreaks located upwind and downwind of poultry farms will reduce and manipulate air flow around the facility to reduce the spread of odors. Overhead winds can lift particles and gases into the lower atmosphere to help dilute and disperse odors. Also, more clean air diverts up and over the source of odor. Diagram by Todd Leuty.



This photo shows the problem and the solution. Housing is increasingly encroaching on typically agricultural lands. The Austree hybid willow plants and Norway spruces will absorb gaseous ammonia and odors, and hide the poultry operations from their neighbors. Photo by PA NRCS.

select windbreak plants that do not produce large amounts of seed or fruits that attract birds which may spread these diseases. Fruiting can be avoided by using male cultivars of dioecious plants (e.g., hollies) or fruitless cultivars.

Windbreaks help filter and capture nutrients from runoff and ground water through root absorption of up to an estimated 80% of the nitrogen and phosphorus in certain environments. Nutrient uptake by plants helps reduce the amount of nutrients that are available to enter adjacent water courses.

Windbreak/Buffer Design and Maintenance

Plant selection will vary depending on the site. Select plants based on the following factors:

- mature height and spread of the plant
- soil type
- drainage and moisture conditions
- wind conditions
- precipitation
- USDA hardiness range
- growth rate
- whether it is a native or introduced species
- location and distance from exhaust fans
- farm layout (location of roads and neighbors)

To maximize particulate trapping, select plants based on the following factors:

- high leaf surface roughness (plants with leaf hairs, leaf veins, and small leaf size)
- complex leaf shapes
- large leaf areas
- medium to rapid plant growth rates

Windbreak Design

Selection and Arrangement

It is usually best to select several different species of trees and shrubs for use in windbreaks. This helps prevent the loss or destruction of the entire windbreak if insect pests or tree diseases occur on certain species. Having diversity also offers a better chance for tree survival during alternating seasons of drought and/or wet soil conditions.

Deciduous shrubs are generally planted in the perimeter rows, followed by deciduous trees towards the middle or along the downwind side where they can grow more efficiently. Deciduous plants planted near the tunnel ventilation fans will accumulate dust particles during the growing season when the fans are operating. Those leaves will then drop off in the autumn when the fans are not being used. The plants will then leaf out in the spring repeating this process.

To provide an effective windbreak, a combination of plant growth rates should be used in the overall design. Within each row, select species with similar growth rates to provide an even

height. Faster growing plants, which provide quick visual screening, generally are short lived and will need to be replaced sooner than slower growing species.

Where site conditions allow, place plantings around the entire perimeter of the odor source. A curved planting is easier to cultivate and offers a more pleasing appearance than one with squared corners. The closer the windbreak is positioned to the poultry house, the better the odor, dust and ammonia will be trapped and dispersed (Lin et al 2006). However, the windbreak should be placed a minimum of 50 feet from the sidewalls and 80 feet from the ends of the

houses for access. Any closer to the ventilation fans will cause the plants to become desiccated from the higher wind speed. The nearest row of windbreak plantings should be set back from buildings and waste storage areas by a distance that is at least 10 times the exhaust fan diameter. For example, if the tunnel ventilation fan has a diameter of 6 feet, then the first line of plants should be planted 60 feet away. In those cases where multiple fans are used in one location, this planting distance formula will need to be modified. Consider mounding the soil to create berms with plants located on top of the mound. When using evergreen plants, consider that winter snows will be heavily deposited down wind at a distance of 10 times the total height of the plants. Be sure that roads or other buildings are not located in this area where additional snow will be deposited.



The exhaust of this multiple fan poultry house is effectively deflected by the berm and plants. Due to the quantity of fans the distance between plants and exhaust fans is much more than usual, 150 feet shown here. Irrigation is important for plants in this situation as the soil dries much more quickly due to the slope. Photo by PA NRCS.

Evergreens

Evergreens are useful for providing year-round visual screening and particulate trapping, but tend to become overloaded with particulates if planted too close to ventilation fans. Poultry house particulates do not wash off easily and thick coatings of particulates on evergreens will result in early mortality. Best results will be achieved when evergreens are placed on the downwind side of deciduous trees, which will intercept significant amounts of particulates during the growing season. The exception to this rule is for evergreen hollies (*Ilex sp.*) which have a thick waxy leaf surface which will tolerate the thick coatings of particulates which will be washed off by the rain. This characteristic allows evergreen hollies to be used in the high particulate load areas directly behind ventilation fans. White and loblolly pines have been used extensively in the mid-Atlantic as windbreaks. These plants have been used with poor results and are not tolerant of high levels of ammonia. They are not recommended for planting in areas opposite ventilation fans, but may be an option for use in non-discharge areas.

Number of Rows

The proper number of rows in a windbreak will depend on the space available, and the species to be used. When possible, windbreaks should consist of three or more rows of deciduous and evergreen species of plants. Additional rows of plants may be needed near the tunnel ventilation fans as those plants will be growing in a more stressful environment and plant death will be more

frequent. Selecting the correct species for the situation, and then following up with proper care is much more important than the number or rows.

Spacing Within the Row

The spacing between the plants within the row will vary depending on the size and growth rate of the plants. Faster growing plants should be placed further apart than slower growing plants. Overall, spacing within the windbreak should be closer than the spacing typically used for landscape plantings. This will promote quicker vertical growth which will shade out weed competition and decrease the amount of time that it takes for the windbreak to become functional. Greater crown and root spread can be expected from hardwoods than from evergreens. General guidelines are as follows:

Small Shrubs (4 feet – 12 feet tall) – 4 feet to 6 feet apart Large Shrubs and Small Trees (12 feet – 30 feet tall) – 6 feet to 10 feet apart Large Trees (over 30 feet tall) – 10 feet to 14 feet apart Evergreen Trees – 8 feet to 14 feet apart depending on the species

Spacing Between Rows

Spacing between rows depends on the amount of moisture available, the species planted in each row, and the width of implements used for cultivation or maintenance. Planting rows too closely together is a common mistake. After a few years of growth, severe competition for moisture and nutrients begins and faster-growing trees overtop others. Machinery often cannot move between the rows, the windbreak falls into disrepair and eventually becomes ineffective. In most cases, a spacing of 16 to 20 feet between rows is recommended depending on site conditions and species selected. If the site is dry, more space is necessary to minimize competition. More space would also be needed for species which are sensitive to shade. The distance between the shrub row and the tree row does not need to be as great as the spacing between tree rows. Adequate spacing between deciduous and evergreen rows in necessary because faster growing deciduous trees tend to overtop and suppress evergreens if planted too close. Evergreen and deciduous trees should not be mixed in the same row for this same reason.

Windbreak Establishment and Maintenance

Stock Size

The best size of the planting stock will vary with the growth rate of the plant. Fast growing plants can be purchased small as their fast growth rate will quickly make up for their initial size. Conversely, slower growing plants should be purchased as large as possible since it will take longer for them to become a functional part of the windbreak. Bare-rooted seedlings are discouraged from being used due to their slower establishment time, and will suffer more from transplant shock, especially in this stressful environment. Either container or balled-and-burlapped plant material, which are more expensive than bare-rooted stock, are fine for use in poultry windbreaks.

Planting Time

The timing of planting varies with the type of plant (evergreen or deciduous). Evergreen plants are best planted in the early spring so that they have the entire growing season to grow new roots. This is important due to the fact that evergreens retain their leaves and are prone to drying

out in the winter when the soil is frozen and water is not available for uptake. Deciduous plants, on the other hand, can be planted either in the spring or autumn. Even after newly planted deciduous plants have dropped their leaves in the autumn, root growth is still taking place. Soil temperatures change less rapidly than air temperatures; therefore, soil usually retains warmth well into late autumn. During this time, watering is still very important during periods of little or no rain. The rule of thumb is to water anytime during the growing season when there is not 1 inch of rain within a week. Although not recommended, should bare-root deciduous plants be used, they must always be planted in early spring.

Moisture

Irrigation is very important during the first five years of plant establishment. Plant survival and the overall health of the plants will benefit from using drip irrigation. Either an emitter placed in the area of the plant or tubing with regularly spaced holes will work. Irrigation is especially important for those plants located in front of the fans, due to additional stresses from the desiccating high winds, ammonia and dust.

Weed Control

Weed control is also extremely important to the establishment and longevity of the windbreak. By using plastic weed barrier with organic mulch, competition from weeds will be limited, retaining soil moisture, and maximizing plant growth. Pre- and post-emergent herbicides may need to be used where the weed pressure is high. Follow all label directions and state pesticide guidelines. Weed management (especially grass control) is extremely important until the young plants have outgrown the weeds.

Replanting

Windbreaks plantings are seldom 100% successful. Prompt replacement of plants which do not survive is essential for the development of a functional poultry windbreak. Replacement planting should be continued for up to 3 years after the initial planting when conditions are again optimal for planting. It is very important to replant within the rows because the effectiveness of the windbreak depends largely on having full rows. It is a good idea to order a few extra plants when purchasing the plants and "heel them in" at a location where you can give them extra care. When replacements are needed you will have the same species, at the same age and size as the originals in the row. To "heel in" plants, remove the containers or plant directly the balled-and-burlapped stock at a very close spacing. Cover the roots with soil and water. If possible, heel in plants in a cool, shady place and water as needed.

Table 1. Proven Plants for Windbreaks/Buffers on Poultry Production Farms

The following table represents plants which have been planted as buffers around poultry farms in the Mid-Atlantic U.S. and have proven to be effective in passive ammonia absorption. Refer to the Appendix for information on Hardiness Zones.

			Hard.	Size	Growth	
Botanical Name/Cultivar	Common Name	Family	Zone ¹	(H x W)	Rate*	Native Range
Gleditsia triacanthos var.	honeylocust	Fabaceae	4 - 9	50' x 50'	fast	PA to MS, west to NE
inermis						and TX
Ilex cornuta x aquifolium	Nellie Stevens holly	Aquifoliceae	6 - 9	20' x 15'	fast	Asia, Europe
'Nellie Stevens'						
Ilex crenata 'Steeds'	Japanese holly	Aquifoliceae	6 - 9	8' x 4'	moderate	Japan, Korea, China
Ilex opaca	American holly	Aquifoliceae	5 - 9	40' x 20'	slow to	MA to FL, west to
					moderate	MO and TX
Juniperus virginiana	eastern red cedar	Cupressaceae	3b - 9	40' x 20'	moderate	ME to FL, west to
						ND, CO and TX
Picea abies	Norway spruce	Pinaceae	3b - 7	50' x 25'	moderate	north-central Europe
					to fast	
Populus deltoides x nigra 'Spike'	hybrid poplar	Salicaceae	4 - 7	70' x 30'	fast	sterile hybrid
Salix matsudana x alba	Austree hybrid willow	Salicaceae	4 - 8	60' x 15'	very fast	American/Asian
						hybrid (male)
Salix purpurea 'Streamco'	purpleosier willow	Salicaceae	4 - 7	15' x 15'	fast	Europe
Taxodium distichum	bald cypress	Taxodiaceae	5 - 9	70' x 20'	slow to	DE to FL, west to MO
					moderate	and LA
Thuja plicata x standishii	arborvitae	Cupressaceae	5 - 7	60' x 20'	fast	hybrid
'Green Giant'						
xCupressocyparis leylandii	Leyland cypress	Cupressaceae	6 - 10	100' x	very fast	hybrid
				20'		

^{*} Growth rates – slow = less than 1'/year, moderate = 1' - 2'/year, fast = 2' - 3'/year, very fast = over 3'/year

Table 2. Cultural Requirements of Proven Plants for Windbreaks/Buffers on Poultry Production Farms

For best results, always chose a plant species that meets your site conditions. Refer to the Appendix for information on Natural Drainage Classes.

			Natura	l Drainag	e Class ²		Light l	Requirer	nents	
Botanical Name/Cultivar	Common Name	Excessively Drained	Well Drained	Moderate Well Drained	Somewhat Poorly Drained	Poorly Drained	Sun	Part Shade	Shade	Notes
Gleditsia triacanthos var. inermis	honeylocust		X	X	X		X	X		Resistant to compacted soil, salt tolerant.
Ilex cornuta x aquifolium 'Nellie Stevens'	Nellie Stevens holly		X	X	X		X	X		Fruitless without a male pollinator.
Ilex crenata 'Steeds'	Japanese holly		X	X			X	X		Excellent for high emission load areas.
Ilex opaca	American holly		X	X			X	X		Consider using 'Jersey Knight', a male fruitless cultivar.
Juniperus virginiana	eastern red cedar	X	X	X			X	X		Sensitive to soil compaction, salt tolerant.
Picea abies	Norway spruce			X	X		X			
Populus deltoides x nigra 'Spike'	hybrid poplar			X	X		X	X		
Salix matsudana x alba	Austree hybrid willow		X	X	X	X	X	X		Provides a visual screen within 1-2 years due to fast growth rate.

			Natura	l Drainag	e Class ²		Light I	Requirer	nents	
Botanical Name/Cultivar	Common Name	Excessively Drained	Well Drained	Moderate Well Drained	Somewhat Poorly Drained	Poorly Drained	Sun	Part Shade	Shade	Notes
Taxodium distichum	bald cypress		X	X	X	X	X			
Thuja plicata x standishii 'Green Giant'	arborvitae		X	X			X	X		
xCupressocyparis leylandii	Leyland cypress		X	X			X	X		Fungal canker and insects can be a problem; 'Green Giant' arborvitae is the preferred alternative.

Table 3. Potential Plants for Windbreaks/Buffers of Poultry Production Farms

This table represents plants which have been planted as street trees and shrubs. In urban environments, tolerance to pollutants such as ozone and sulfur dioxide, salt, heat, drought, and soil compaction are necessary. While these plants have not yet been tested for use around poultry facilities, they should be considered for use and further evaluation given their tolerance of inhospitable environments. White and loblolly pines have been used with very poor results and are not tolerant of high levels of ammonia. Therefore, pines are not recommended for planting in areas opposite ventilation fans, but may be an option for use in non-discharge areas. Refer to the Appendix for information on Hardiness Zones.

	Common			Hardiness	Size	Growth	
Botanical Name	Name	Family	Cultivar	Zone ¹	(H x W)	Rate*	Native Range
Acer buergerianum	trident maple	Aceraceae		5 - 8	20' x 30'	slow-mod.	China
Acer campestre	hedge maple	Aceraceae	Queen Elizabeth	5 - 8	25' x 35'	slow	Europe
Acer negundo	boxelder	Aceraceae	Baron	3 - 9	30' x 50'	fast	entire US
Acer rubrum	red maple	Aceraceae	Brandywine	4 - 8	12' x 25'	moderate to fast	Eastern US
Acer rubrum x saccharinum	Freeman maple	Aceraceae	Autumn Blaze	4 - 8	40' x 50'	fast	Eastern US
Acer truncatum hybrid	purpleblow maple	Aceraceae	Norwegian Sunset, Pacific Sunset	4 - 8	25' x 35'	slow	Northern China, Russia
Alnus rugosa	speckled alder	Betulaceae		3 - 6	15' x 20'	moderate	Canada south to IL and VA
Alnus serrulata	hazel alder	Betulaceae		5 - 9	15' x 15'	moderate	ME to FL, west to KS and LA
Amorpha fruticosa	false indigo	Fabaceae		4 - 9	10' x 15'	moderate	CT to FL, west to MN and LA
Caragana arborescens	Siberian pea shrub	Fabaceae		2 - 7	15' x 15'	moderate to fast	Siberia and Mongolia
Celtis laevigata	sugar hackberry	Celastraceae	All Seasons, Magnifica	4 - 8	25' x 40'	moderate to fast	VA to FL, west to MO and TX

	Common			Hardiness	Size	Growth	
Botanical Name	Name	Family	Cultivar	Zone ¹	(H x W)	Rate*	Native Range
Celtis occidentalis	common hackberry	Celastraceae		3 - 9	50' x 50'	moderate to fast	MA to NC, west to ND and OK
Cercis canadensis	redbud	Fabaceae		3 - 9	25' x 25'	moderate	NJ to FL, west to IA and TX
Ginkgo biloba	ginkgo	Ginkgoaceae	Autumn Gold, Lakeview, Palo Alto, President	4 - 8	30' x 70'	slow to moderate	Eastern China
Gymnocladus dioicus	Kentucky coffeetree	Fabaceae		3b - 8	40' x 60'	slow to moderate	NY to GA, west to NE and OK
Ilex decidua	possumhaw holly	Aquifoliceae	Red Escort (male)	5 - 9	10' x 15'	slow to moderate	MD to FL, west to KS and TX
Ilex glabra	inkberry holly	Aquifoliceae	Compacta, Densa, Nordic, Cape Cod	5 - 9	8' x 10'	slow, fast from sucker shoots	NY to FL, west to s MO and TX
Ilex vomitoria	yaupon holly	Aquifoliceae		7 - 10	15' x 20'	moderate to fast	VA to FL, west to OK and TX
Maackia amurensis	Amur maackia	Fabaceae		4 - 7	25' x 30'	slow	Manchuria
Maclura pomifera	osage orange	Moraceae	White Shield	4 - 9	30 x 30	fast	AR to LA, west to OK and TX
Metasequoia glyptostroboides	dawn redwood	Taxodiaceae		5 - 8	25' x 80'	fast	China
Nyssa sylvatica	black tupelo	Nyssaceae		4 - 9	25' x 40'	slow to moderate	ME to FL, west to MI and TX
Ostrya vurginiana	hop hornbeam	Betulaceae		3 - 9	25' x 35'	slow	Eastern US
Picea pungens	Colorado spruce	Pinaceae		3 - 7	15' x 50'	slow to moderate	Central and southern Rocky Mountains
Platanus occidentalis	sycamore	Platanaceae		4 - 9	90' x 90'	moderate to fast	ME to FL, west to and TX

	Common			Hardiness	Size	Growth	
Botanical Name	Name	Family	Cultivar	Zone¹	(H x W)	Rate*	Native Range
Platanus x acerifolia	London	Platanaceae	Columbia,	5 - 8	70' x	moderate	American and
	planetree		Liberty		100'		Asian hybrid
Quercus acutissima	sawtooth oak	Fagaceae		6 - 9	50' x 50'	moderate	Asia
Quercus bicolor	swamp white	Fagaceae		4 - 8	50' x 50'	slow to	ME to NC, west to
	oak					moderate	WI and MO
Quercus macrocarpa	bur oak	Fagaceae		3 - 8	70' x 70'	slow	ME to TN, west to
							ND and OK
Quercus phellos	willow oak	Fagaceae		5 - 9	35' x 50'	moderate	MD to FL, west to
							MO and TX
Quercus prinus	chestnut oak	Fagaceae		4 - 8	90' x 90'	moderate	NH to SC, west to
					-01 -01		IN and AL
Quercus rubra	northern red	Fagaceae		3 - 7	60' x 60'	fast	ME to GA, west to
	oak	_				_	MN and AR
Quercus shumardii	shumard oak	Fagaceae		5 - 9	45' x 60'	moderate	NC to FL, west to
	T 1 1			~ ~	401 701	to fast	IN, MO and TX
Quercus texana (syn.	Texas red oak	Fagaceae		5 - 9	40' x 50'	fast	KY to Al, west to
Q. nuttallii)				4 0	201 101	2	MO and TX
Robinia	black locust	Fabaceae		4 - 8	30' x 40'	fast	Eastern US
pseudoacacia	1 1	E 1		4 7	(0) (0)	1 ,	CI ' LIZ
Sophora japonica	scholar tree	Fabaceae		4 - 7	60' x 60'	moderate	China and Korea
/TI 1 1				4 0	201 (01	to fast	XXI A MID A
Thuja plicata	giant	Cupressaceae		4 - 8	20' x 60'	moderate	Western MT to
Tilia cordata	arborvitae littleleaf linden	Tiliaceae		21. 7	401 601		WA and OR
				3b - 7	40' x 60'	moderate	Europe
Tilia tomentosa	silver linden	Tiliaceae	77 11 E	4 - 7	40' x 60'	moderate	Europe, W. Asia
Ulmus americana	American elm	Ulmaceae	Valley Forge,	3 - 9	40' x 70'	moderate	Eastern US
			Jefferson,			to fast	
			Princeton, New				
			Harmony				

	Common			Hardiness	Size	Growth	
Botanical Name	Name	Family	Cultivar	Zone ¹	$(\mathbf{H} \mathbf{x} \mathbf{W})$	Rate*	Native Range
Ulmus carpinifolia	smoothleaf elm	Ulmaceae	Elsmo, Patriot, Homestead, Prospector	5 - 7	40' x 70'	fast	Europe, N Africa
Zelkova serrata	Japanese zelkova	Ulmaceae		5 - 8	40' x 60'	moderate to fast	Asia

Table 4. Cultural Conditions of Potential Plants for Windbreaks/Buffers of Poultry Production Farms

For best results, always chose a plant species that meets your site conditions. Refer to the Appendix for information on Natural Drainage Classes.

			Natura	al Drainag	e Class ²		Light	Require	ments	
Botanical Name	Common Name	Excessively Drained	Well Drained	Moderate Well Drained	Somewhat Poorly Drained	Poorly Drained	Sun	Part Shade	Shade	Notes
Acer buergerianum	trident maple		X	X			X	X		Used as a street tree in Japan.
Acer campestre	hedge maple		X	X	X		X	X		'Queen Elizabeth' is faster growing and tolerant of soil compaction.
Acer negundo	boxelder		X	X	X		X	X		'Baron' is a seedless cultivar.
Acer rubrum	red maple		X	X	X	X	X	X		'Brandywine' is a male (seedless) cultivar.
Acer rubrum x saccharinum	Freeman maple		X	X	X	X	X	X		
Acer truncatum hybrid	purpleblow maple		X	X	X		X	X		
Alnus rugosa	speckled alder			X	X	X	X			Fixes atmospheric nitrogen, sensitive to heat and drought.
Alnus serrulata	hazel alder			X	X	X	X			Fixes atmospheric nitrogen, sensitive to heat and drought.
Amorpha fruticosa	false indigo		X	X	X		X			pH adaptable, salt tolerant, fruit is banned in CT, fixes atmospheric nitrogen.

			Natura	al Drainag	e Class ²		Light	Require	ments	
Botanical Name	Common Name	Excessively Drained	Well Drained	Moderate Well Drained	Somewhat Poorly Drained	Poorly Drained	Sun	Part Shade	Shade	Notes
Caragana arborescens	Siberian pea shrub		X	X	X		X	X		Fixes atmospheric nitrogen, very
urborescens	Siliuo									adaptable, salt tolerant.
Celtis laevigata	sugar hackberry		X	X	X	X	X			Tolerant of soil compaction.
Celtis occidentalis	common hackberry	X	X	X	X		X			Salt tolerant.
Cercis canadensis	redbud		X	X			X	X		
Ginkgo biloba	ginkgo		X	X	X		X	X		Use male (fruitless) cultivars.
Gymnocladus dioicus	Kentucky coffeetree		X	X	X		X			
Ilex decidua	possumhaw holly			X	X	X	X	X		I. opaca can serve as a pollinator; 'Escort' is a seedless cultivar.
Ilex glabra	inkberry holly			X	X	X	X	X	X	Plants sucker to form thickets.
Ilex vomitoria	yaupon holly	X	X	X X	X X	X	X	X		Salt tolerant.
Maackia amurensis	Amur maackia		X	X			X	X		Fixes atmospheric nitrogen.
Maclura pomifera	osage orange	X	X	X	X		X			'White Shield' is thorn free and male (fruitless), sensitive to soil compaction.
Metasequoia glyptostroboides	dawn redwood		X	X	X	X	X			
Nyssa sylvatica	black tupelo		X	X	X	X	X	X		Tap rooted species, transplant in the spring, salt tolerant.

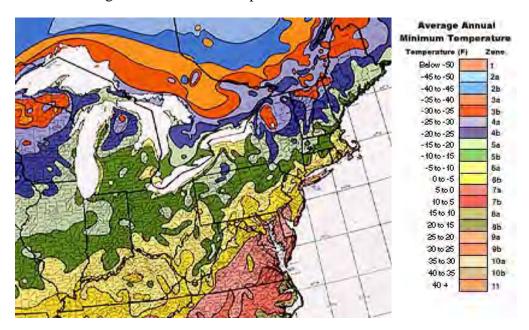
			Natura	al Drainag	e Class ²		Light	Require	ments	
Botanical Name	Common Name	Excessively Drained	Well Drained	Moderate Well Drained	Somewhat Poorly Drained	Poorly Drained	Sun	Part Shade	Shade	Notes
Ostrya vurginiana	hop hornbeam	X	X	X			X	X		Reestablish slowly after transplanting, soil compaction sensitive.
Picea pungens	Colorado spruce		X	X	X		X			
Platanus occidentalis	sycamore		X	X	X	X	X	X		2, 4-D sensitive.
Platanus x acerifolia	London planetree		X	X	X	X	X	X		
Quercus acutissima	sawtooth oak			X	X	X	X	X		Fastest growing oak.
Quercus bicolor	swamp white oak				X	X	X	X		Tolerant of soil compaction.
Quercus macrocarpa	bur oak		X	X	X		X	X		Difficult to transplant due to taproot, very adaptable, sensitive to soil compaction.
Quercus phellos	willow oak		X	X	X		X	X		Transplants well.
Quercus prinus	chestnut oak	X	X	X	X		X	X		Transplants well.
Quercus rubra	northern red oak		X	X	X		X	X		Transplants well.
Quercus shumardii	shumard oak		X	X	X		X			Slow growth after transplanting.
Quercus texana (syn. Q. nuttallii)	Texas red oak		X	X	X	X	X			Very good for Southern areas, transplants well.
Robinia pseudoacacia	black locust	X	X	X			X	X		Salt tolerant.
Sophora japonica	scholar tree		X	X	X		X			

			Natura	al Drainag	ge Class ²		Light 1	Require	ments	
Botanical Name	Common Name	Excessively Drained	Well Drained	Moderate Well Drained	Somewhat Poorly Drained	Poorly Drained	Sun	Part Shade	Shade	Notes
Thuja plicata	giant arborvitae		X	X	X	X	X	X		
Tilia cordata	littleleaf linden		X	X			X			
Tilia tomentosa	silver linden		X	X			X			
Ulmus americana	American elm		X	X	X		X			Use new Dutch Elm Disease tolerant cultivars.
Ulmus carpinifolia	smoothleaf elm		X	X			X			
Zelkova serrata	Japanese zelkova		X	X			X			

Appendix

1 - USDA Plant Hardiness Zone Map

For more detailed information on the USDA Hardiness Zone Map visit their web site at: http://www.usna.usda.gov/Hardzone/ushzmap.html



2 - Natural Drainage Classes

Refers to the frequency and duration of periods of saturation or partial saturation during soil formation, as opposed to altered drainage, which is commonly the result of artificial drainage or irrigation but may be caused by the sudden deepening of channels or the blocking of drainage outlets. With alteration of the site either by irrigation or by drainage practices, these natural drainage classes may be modified to fit the moisture requirements of the plants. Seven classes of natural soil drainage are recognized. Tables 2 and 4 utilize 5 of these drainage classes.

Excessively drained. Water is removed from the soil very rapidly. Excessively drained soils are commonly very coarse textured, rocky, or shallow. Some are steep. All are free of the mottling related to wetness.

SOIL MORPHOLOGY: Typically excessively drained soils have bright matrix colors (high chroma and value) in the upper subsoil which gradually fades with depth to the unweathered color of the underlying geologic material. Some excessively drained soils that have developed within recently deposited sediments (flood plain deposits and coastal dunes) lack color development within the subsoil. Excessively drained soils are not mottled within the upper 5 feet. Soil textures are loamy fine sand or coarser below 10 inches.

Somewhat excessively drained. Water is removed from the soil rapidly. Many somewhat excessively drained soils are sandy and rapidly pervious. Some are shallow. Some are so steep

that much of the water they receive is lost as runoff. All are free of the mottling related to wetness.

Well drained. Water is removed from the soil readily, but not rapidly. It is available to plants throughout most of the growing season, and wetness does not inhibit growth of roots for significant periods during most growing seasons. Well drained soils are commonly medium textured. They are mainly free of mottling.

SOIL MORPHOLOGY: Typically well drained soils have bright matrix colors (high chroma and value) in the upper subsoil which gradually fades with depth to the unweathered color of the underlying geologic material. Well drained soils that have developed within recently deposited sediments (floodplain deposits) lack color development. These soils are not mottled within the upper 40 inches. Soil mottling (few, faint and distinct mottles) may be present in some compact glacial till soils above the hardpan layer but are not present in the underlying substratum. Soil textures are typically very fine sand or finer in horizons between 10 to 40 inches.

Moderately well drained. Water is removed from the soil somewhat slowly during some periods. Moderately well drained soils are wet for only a short time during the growing season, but periodically they are wet long enough that most mesophytic crops are affected. They commonly have a slowly pervious layer within or directly below the solum, or periodically receive high rainfall, or both.

SOIL MORPHOLOGY: Typically moderately well drained soils have bright matrix colors (high chroma and value) in the upper subsoil. Moderately well drained soils have distinct or prominent mottles between a depth of 15 and 40 inches below the soil surface.

Somewhat poorly drained. Water is removed slowly enough that the soil is wet for significant periods during the growing season. Wetness markedly restricts the growth of mesophytic crops unless artificial drainage is provided. Somewhat poorly drained soils commonly have a slowly pervious layer, a high water table, additional water from seepage, nearly continuous rainfall, or a combination of these.

Poorly drained. Water is removed so slowly that the soil is saturated periodically during the growing season or remains wet for long periods. Free water is commonly at or near the surface for long enough during the growing season that most mesophytic crops cannot be grown unless the soil is artificially drained. The soil is not continuously saturated in layers directly below plow depth. Poor drainage results from a high water table, a slowly pervious layer within the profile, seepage, nearly continuous rainfall, or a combination of these.

SOIL MORPHOLOGY: Typically poorly drained soils are mottled directly below the A horizon. Depending upon soil profile development and soil textures, matrix colors may vary. Soils that exhibit pronounced Spodic development have an albic horizon which has faint to prominent mottles and is underlain by an ortstein or a spodic horizon which is partially cemented or has iron nodules. The Spodic horizon and material directly underlying the spodic have distinct and prominent mottles. Poorly drained soils with very fine sand or finer textures have matrix colors with chroma of 2 or less within 20 inches of the surface. Poorly drained soils with loamy fine sand or coarser textures have matrix colors with chroma of 3 or less within 12 inches of the surface.

Very poorly drained. Water is removed from the soil so slowly that free water remains at or on the surface during most of the growing season. Unless the soil is artificially drained, most mesophytic crops cannot be grown. Very poorly drained soils are commonly level or depressed and are frequently ponded. Yet, where rainfall is high and nearly continuous, they can have moderate or high slope gradients.

SOIL MORPHOLOGY: Typically very poorly drained soils have organic soil materials that extend from the surface to a depth of 16 inches or more, or either have a histic epipedon or an epipedon that has "n" value of greater than 0.7. These soils are generally gleyed directly below the surface layers.

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Conservation Buffers in Organic Systems

California Implementation Guide



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Figure 2. This hedgerow protects the adjacent crop from dust and reduces the risk of dust-induced mite infestations.

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<u>Figure 1.</u> (front cover) Four-year-old demonstration hedgerow with ninebark and checker mallow at the USDA NRCS Plant Materials Center, Corvallis, Oregon. The hedgerow is a collaborative project of the Xerces Society, the Farmscaping for Beneficials Program at Oregon State University and the NRCS Plant Materials Center.

Photo: Gwendolyn Ellen, Oregon State University, 2011.

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Purpose

The purpose of this document is to provide guidance in installing practices for use as buffers in organic production systems in order to meet the National Organic Program (NOP) regulations. Conservation buffers are generally strips of vegetation placed in the landscape to influence ecological processes and provide a variety of services. They are called by many names including wildlife corridors, greenways, windbreaks, and filter strips. (Bentrup, G. 2008)

In the context of organically managed systems, buffer zones are required under NOP rules if there is a risk of contamination, via drift or flow, of substances not allowed under organic regulations. Situations in which buffers will likely be required by the certifier, according to NOP rules, include:

- > An organic field bordering a conventional field on which prohibited substances are being used.
- ➤ An organic field bordering a roadway to which prohibited substances are applied (usually to control weeds).
- ➤ An organic field bordering residential housing in which prohibited substances are being applied.
- An organic field that has, or is immediately adjacent to, fencing made of lumber treated with prohibited substances.

When buffers are required in organic production systems, they represent an opportunity to implement conservation practices that benefit the operation by creating habitat for beneficial organisms (birds, pollinators, or parasites and predators of crop pests), as well as providing a barrier against weed seed migration, preventing wind damage to crops and protecting water quality. In doing so, buffers may simultaneously meet other NOP regulations which require that organic operations "maintain or improve the

natural resources of the operation" (NOP Sec 205.200) and, in perennial systems, can be used to introduce biological diversity in lieu of crop rotation.

According to the NOP, buffer zones between organic crops and non-organic crops must be of sufficient size and structure to prevent drift or runoff of non-approved substances. Although there are no specific size requirements, typically a buffer zone is 25- to 30-feet wide. The organic producer can grow non-organic crops in the buffer zone, leave it fallow, or plant this area to hedgerows, windbreaks, meadows, or beetle banks, as appropriate. If a crop is taken from the buffer zone it will need to be harvested separately from the organic crop and the producer must document that it was harvested, stored, and sold as non-organic.

If the organic certifying agency has determined that a buffer is needed, they must also approve the design of the buffer. NRCS staff can work with the landowner to identify additional conservation objectives for the buffer (see Table 1), which may include habitat for parasitoids and predators of crop pests, reducing soil erosion, protecting water quality, wind or dust breaks, habitat and cover for other wildlife including pollinators, and aesthetic considerations.

Hedgerow Planting (422) is a focus of this document as this practice can readily address NOP requirements. However, buffers may be created on organic operations using other NRCS conservation practices, such as Field Borders (386), Herbaceous Wind Barriers (603), Windbreak/Shelterbelt Establishment (380), Riparian Forest Buffer (391), Filter Strip (393) or Conservation Cover (327). All of these practices can be designed to have multiple benefits for the operation.

Relevant National Organic Program (NOP) Regulations

Section 205.202 Land Requirements

Any field or farm parcel from which harvested crops are intended to be sold, labeled, or represented as "organic," must:

(c) Have distinct, defined boundaries and buffer zones such as runoff diversions to prevent the unintended application of a prohibited substance to the crop or contact with a prohibited substance applied to adjoining land that is not under organic management.

Section 205.2 Definition of Buffer Zone

An area located between a certified production operation or portion of a production operation and an adjacent land area that is not maintained under organic management. A buffer zone must be sufficient in size or other features (e.g., windbreaks or a diversion ditch) to prevent the possibility of unintended contact by prohibited substances applied to adjacent land areas with an area that is part of a certified operation.

NRCS Practice and Definition	Primary Benefits/Functions of Practice	Secondary Benefits / Functions of Practice
Field Borders (386) Strips of permanent vegetation established at the edge or around the perimeter of a field.	Reduce erosion from wind and water.Protect soil and water quality.	 Manage pest populations. Provide wildlife food and cover. Provide food, shelter and overwintering sites for beneficial invertebrates as a component of integrated pest management
Hedgerow Planting (422) Establishment of dense vegetation in a linear design to achieve a natural resource conservation purpose.	 Habitat, including food, cover, and corridors for terrestrial wildlife. Enhance pollen, nectar, and nesting habitat for pollinators. Provide food, shelter and overwintering sites for predaceous and beneficial invertebrates as a component of integrated pest management. Intercept airborne particulate matter. Reduce chemical drift and odor movement. Create screens and barriers to noise and dust. 	 Create food, cover, and shade for aquatic organisms that live in adjacent streams or watercourses. Increase carbon storage in biomass and soils. Create living fences. Delineate boundaries & contour guidelines. Prevent weed seed migration into the field.
Herbaceous Wind Barriers (603) Herbaceous vegetation established in rows or narrow strips in the field across the prevailing wind direction.	 Reduce soil erosion from wind. Reduce soil particulate emissions to the air. Protect growing crops from damage by wind or wind-borne soil particles. 	➤ Enhance snow deposition to increase plant-available moisture.
Windbreak/Shelterbelt Establishment (380) Linear plantings of single or multiple rows of trees or shrubs or sets of linear plantings.	 ➤ Reduce wind erosion. ➤ Protect growing plants. ➤ Provide shelter for structures and livestock. ➤ Provide wildlife habitat. ➤ Improve irrigation efficiency. 	 Manage snow. Provide a tree or shrub product. Provide noise and visual screens. Enhance aesthetics. Increase carbon storage. Delineate property and field boundaries. Prevent weed seed migration into the field. Provide food, shelter and overwintering sites for beneficial invertebrates such as insect predators, parasitoids and native pollinators for IPM and crop pollination.
Riparian Forest Buffer (391) An area of predominantly trees and shrubs located adjacent to and up-gradient from watercourses or water bodies.	 Create shade to lower water temperatures to improve habitat for fish and other aquatic organisms. Create wildlife habitat and establish wildlife corridors. Reduce excess amounts of sediment, organic material, nutrients, pesticides and other pollutants in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow. Provide protection against scour erosion within the floodplain. Restore natural riparian plant communities. 	 Provide a source of detritus and large woody debris for fish and other aquatic organisms and riparian habitat and corridors for wildlife. Moderate winter temperatures to reduce freezing of aquatic over-wintering habitats. Increase carbon storage in plant biomass and soils. Provide a harvestable crop of timber, fiber, forage, fruit, or other crops consistent with other intended purposes.
Conservation Cover (327) Establishing and maintaining permanent vegetative cover. This land is removed from production permanently for the life of the contract.	 Reduce soil erosion and sedimentation. Improve water quality. Enhance habitat for wildlife, predacious insect invertebrates, and pollinators. Improve soil quality. Stabilize slopes. 	 Improve air quality. Manage crop pests. Provide better access to agricultural equipment when soils are moist.

Note: All primary benefits and the majority of secondary benefits are taken directly from NRCS practice standards.

A few secondary benefits were added by reviewers of this document.

Buffer Site Design

Site Selection

- > Location: The overall design of a buffer site must meet NRCS practice criteria as well as the standards of the producer's certifying agency and the National Organic Program. To address NOP buffer requirements, the site selected should be adjacent to an area from which there is a risk of contamination from pesticides or chemical fertilizers not allowed in organic systems. This is commonly along property lines, but in situations where the producer has both organic and conventional operations, the buffer could be in the middle of an operation at the boundary between the two types of production.
- > Width and height: The site selected for the buffer should be wide enough and have space for plants to grow tall enough to intercept any significant pesticide drift from the adjacent conventional operation.
- ➤ Irrigation access: The site should also have access to irrigation water to establish the plants and, in drier areas, address long-term water needs. Drip irrigation works well for plugs or potted plants. For native grasses and wildflower mixes that are broadcast, planting should be done during the rainy season, with back-up sprinkler irrigation.
- > **Soils:** Soil type will influence the plants that will thrive in an area. Amending planting holes with good quality compost also improves growth rate.
- > **Sunlight:** Most native perennial shrubs, forbs, and grasses do best in locations with full sunlight. Plants, however, should be selected based on the site conditions and some varieties thrive in shade.
- > Accessibility: The site should be accessible to equipment for site preparation, planting and maintenance.

Plant Selection

The choice of plants for a buffer will vary based on goals and objectives of the producer. Many potential goals are listed as benefits in Table 1 and include habitat creation, erosion reduction and water quality protection.

- **Pesticide drift mitigation**: If the objective is pesticide drift mitigation to address NOP requirements, buffer plants should be selected to provide enough height, leaf area, and structural diversity to intercept anticipated contamination, especially pesticide drift, from adjacent conventionally managed land. For buffers with a high risk of frequent exposure to insecticides, the buffer should have approximately 40-50% porosity in multiple rows to allow the wind to go through the trees—not up and over—and ensure droplets are captured by the leaves. The design of a buffer should focus on leafy canopy (e.g., evergreen, conifers, and small needles) rather than nectar and pollen resources of beneficial insects. For design details, see Windbreaks Designed with Pollinators in Mind, listed in Appendix C. The method of pesticide application (e.g., aerial application via plane or application by back-pack sprayer) will also be factored in by the certifying agency when determining the size and structure of a buffer zone.
- > Pollinators and beneficials: If the landowner's goal is to provide habitat for beneficials, then the design

- should focus on providing year-round nectar and pollen resources as well as nesting and overwintering habitat. Native plants often provide the greatest benefit.
- ➤ **Planting stock:** As crops in the buffer cannot be sold as certified organic, producers are not required to use certified organic seeds and planting stock. Seeds, however, must not be treated with non-approved synthetic substances to prevent contamination of the adjacent organic crops. Producers should always check with their certifier before planting or applying anything new on their operation.
- > Runoff filtration: A mixture of perennial grasses and forbs can be established for this purpose. The more diverse the vegetation, the more effective the buffer will be at slowing down the run-off and allowing the soil and roots to absorb it. For riparian areas, adding trees and shrubs to a buffer may also provide shade to cool the water in support of desirable aquatic organisms, and habitat for birds and other terrestrial organisms.
- ➤ **Seeding wildflowers**: Wildflowers can be planted from seed within or adjacent to hedgerows to provide plant structure and diversity. Seeding requires excellent site preparation to reduce weed pressure since weed control options are limited when the wildflowers start to germinate. For more information on establishing wildflowers from seed, see *Conservation Cover* (327)

Plant Selection, continued

- for Pollinators: Specifications and Implementation Requirements, listed in Appendix C. Transplanting may improve chances of establishment, but will be more expensive than seeds.
- > Multiple functions: Grasses, forbs, shrubs, and trees have different functions and characteristics within the ecosystem and understanding these will allow the landowner to better design a buffer to meet their objectives. In most situations, buffers designed to meet a grower's primary objective(s) can also meet several secondary objectives by including two or more of these groups of plants. For example, the dense root systems of perennial grasses are ideal for filter strips, but adding forbs creates a more diverse filter strip which can provide habitat for beneficial insects and is more resilient to seasonal variations in weather.

 Adding shrubs and trees further diversifies buffer structure. Use of different plant types should be
- evaluated based on the landowner's objectives and resource concerns, which might include: aesthetic value; bloom time; flower shape, size, and duration of bloom (in support of predators, parasites and pollinators); nesting and perch habitat for birds and raptors; use as windbreaks and road dust barriers; ditch stabilization or revegetation; or providing shade for stream cooling and fish habitat.
- ➤ Plant growth and development: The buffer zone's interaction with adjacent crops is dynamic and will change with time. Plants in the buffer zone will increase in size and change the ecology of the area by providing shade, wind protection, new micro-climates, new habitat including overwintering habitat, and new food sources such as nectar, pollen, berries, seeds, fruit, and alternative prey. Deer may browse on buffer zone plants, as well as crops; rabbits, ground squirrels and rodents may take advantage of buffer zone habitat.

Site Preparation

Site preparation is one of the most important components to successfully establishing a buffer. On an organic operation this can present a unique set of challenges since chemical herbicides are generally not allowed. Competition from weeds can envelop a poorly prepped site, killing off many of the buffer plants (see Figure 7). Investing time—in many cases an entire growing season—and effort in creating a well prepared buffer planting site will pay off in lower maintenance and plant replacement costs, and a better growth and establishment rate for the buffer plants. The focus of site preparation in the buffer area should be:

- > Reduce the weed seed bank in the top soil layers
- > Eliminate all perennial weeds
- > Avoid disturbing the soil after the weed seed bank and weed pressure are reduced.

In areas with poor drainage or high rainfall, planting on raised beds or berms could be used to address issues of wet soils in a buffer. Most native perennials will flourish in a well-drained environment.

Site preparation weed management options are provided in Table 2 and largely focus on trees and shrubs used to meet NOP buffer requirements. Pictures of proper site preparation and maintenance are provided on the following pages.

Resources for Buffer Design

Xerces Society for Invertebrate Conservation.

Pollinator Habitat Installation Guides www.xerces.org/pollinator-conservation/agriculture/ pollinator-habitat-installation-guides Conservation Buffers: Design Guidelines for Buffers, Corridors, and Greenways. Bentrup, G. 2008. Gen. Tech. Rep. SRS-109. Asheville, NC. Department of Agriculture, Forest Service, Southern Research Station. 110 p.

http://nac.unl.edu/buffers/docs/conservation_buffers.pdf

Table 2. Weed Management Options

METHOD: Stale Seedbed			
Where to Use:	Timing:		
> Where weed pressure is low to moderate	➤ Total time: Four to six weeks		
> Areas with a low risk of erosion	➤ Begin: Any time		
> Areas accessible to equipment	➤ Plant: Fall or early spring		

Basic Instructions:

- 1. This can be done in various combinations: Tillage-Irrigation-Light Tillage-Mulch, or Tillage-Irrigation-Flaming-Mulch, or Tillage-Irrigation-Organic Herbicide-Mulch
- 2. Where weed pressure is low, till the existing vegetation for the length and width of the hedgerow.
- 3. Irrigate with sprinklers or natural rainfall.
- 4. To kill emerging weeds, do very shallow tillage (Lilliston or harrow), or use flame weeders or organic herbicides. It's critical to flame or herbicide the weeds when they're small (2 to 3 inches) to kill them. Use of an organic herbicide might require multiple applications.
- 5. Mulch with weed barrier cloth, weed-seed-free straw mulch, wood chips, or other materials.

Organic Herbicides: Herbicides approved for use in organic systems are generally much less effective than conventional herbicides such as glyphosate. Organic herbicides are most effective when used on small plants (1 to 3 inches). See Appendix B for more information about types of organic herbicides.

Mulches: Weed barrier cloth is very effective in suppressing weeds, but does not allow for ground-nesting native bees or other beneficial invertebrates to tunnel in the soil. When it is used in a cropped area, the NOP stipulates that synthetic mulch must be removed at the end of the season. Buffers are generally considered non-cropped areas, unless crops are produced in the buffer zone. In some cases burlap is used as a long-term substitute for synthetic materials. Care should be taken in the selection of mulches in riparian areas as they can be washed into waterways. Organic mulches of straw, wood chips and other materials can be effective weed barriers, and once these materials degrade, ground-nesting bees are able to access the soil surface. A six-inch layer of straw mulch will generally last only one season.

METHOD: Smother Cropping

Where to Use:	Timing:	
➤ Where weed pressure is low to moderate	➤ Total time: One to three months	
➤ Areas with a low risk of erosion	➤ Begin: Summer	
➤ Areas accessible to equipment	➤ Plant: Generally quick-growing summer cover	
	crops are used and planted once temperatures	
	have warmed enough in the spring or summer.	
	➤ Smother crop method may be used prior to	
	use of stale seedbed in the spring or summer	

Basic Instructions:

- 1. Select quick-growing crops appropriate for the site. Buckwheat, millets, and sorghum-sudan grasses are usually best. Clovers are too slow to effectively compete with weeds and legumes will fix unnecessary nitrogen.
- 2. Seed into prepped bed immediately after finished working the soil; use a seeding rate 1.5 to 3 times the normal rate to create an effective smother crop more quickly.
- 3. Once mature, incorporate the cover crop while minimizing soil disturbance.
- 4. Ideally follow smother crop with appropriate version of Stale Seedbed technique described above.

METHOD: Solarization

Where to Use:

- > Where weed pressure is moderate to high
- > Areas with a low risk of erosion
- > Areas accessible to tillage equipment
- Locations with full sun, warm weather, and dry summers

Timing:

- > Begin: Works best during mid-summer
- > Plant: Fall or winter
- ➤ Timing will vary between 4 and 8 weeks depending on sun intensity and temperature during solarization

Basic Instructions:

- 1. Mow, rake, harrow, or till and smooth the site in the spring, raking off debris, if necessary.
- 2. After smoothing the site, irrigate thoroughly and lay clear UV-stabilized plastic, or "regular" clear 1 ml plastic (Molinar, R. 2013, pers. comm.), burying the edges to prevent airflow between the plastic and the ground. Check with your local extension service for which plastic they recommend. Weigh down the center of the plastic if necessary to prevent the wind from lifting it. Use greenhouse repair tape for any rips that occur during the season.
- 3. Remove the plastic in early fall (remember that non-UV stabilized plastic, although less expensive than UV-stabalized plastic, will disintegrate if left too long in the sun) and immediately install transplants. Refer to the Planting Considerations section of this document for specific bed-preparation recommendations.
- 4. Once the plastic is removed, avoid disturbing the soil as much as possible because disturbances bring viable weed seed to the surface.

"Regular" Plastic vs. UV-Stabilized (UVS) Plastic: UVS plastic is much more expensive than "regular" clear plastic, and is only needed if the farmer intends to keep the plastic on the ground beyond 5 - 6 weeks. In hotter areas (such as California's Central Valley), 1 ml of clear plastic (non-UV stabilized) can provide excellent results in four weeks if done during midsummer (mid-June to September). High tunnel greenhouse plastic can be used as a source of UVS plastic if other sources are not available.

Site Preparation Examples

Figures 3, 4, 5, and 6 show preparation at a single location.



Figure 3. The producer started in October with a weed-free planting bed created by disking the soil to remove weeds.



Figure 4. The same site after a January rainstorm, a couple of months post planting.



Figure 5. The site in May, six months after planting. Weed management was done with a combination of hand weeding and straw mulch. Note the fruit trees in wire cages for deer protection. This grower includes fruit trees in hedgerows for himself and the workers on the operation.



Figure 6. The site in June, three years later. Bare spots in the buffer are still being mulched with straw.



Figure 7. This hedgerow has become overwhelmed with grass weeds. Many of the plants succumbed to the weedy competition, even though they had the carton protection, which helps mark the plants for agricultural workers, and protects the young plants from wind and sun and, to a lesser extent, from weed competition. The grower might have been better off using a plastic weed barrier, more aggressive site preparation, or thick mulch.



Figure 8. A two-year-old hedgerow with a plastic weed barrier mulch has been very effective in keeping weeds from growing but prevents perennial forbs, such as yarrow, from expanding beyond the holes in which they were planted. The plastic weed barrier also prevents beneficials such as ground-nesting bees, predacious ground beetles, and spiders from accessing the soil.

Short-Term Maintenance and Planting Considerations

The more densely the buffer area is planted, the more quickly a weed-suppressive cover will be established. This is a cost-benefit decision, as high density plantings also cost more due to the greater number of plants or seeds used. Combinations of perennial trees and shrubs with understories of native grasses and wildflowers can be used in various ways. If seeds are used to plant the buffer (as opposed to plugs or transplants) weed control prior to planting must be very thorough. It is impractical to weed the seeded area once the buffer plants germinate. It may be worthwhile to increase the seeding rate by up to 50% or more in order to achieve a weed-suppressive cover more quickly. Alternatively, a focus on seeding perennial wildflowers will allow for mowing annual weeds. Siteappropriate native plants may also aid in successful buffer establishment because they require less water and nutrients.

Regular shovels are usually adequate for transplanting most woody nursery stock. However, dibble sticks or mechanical transplanters are sometimes helpful for plugplanting. Power augers and mechanical tree spades can be helpful for larger plants. Depending on weed pressure, hedgerow plants can be installed through planting holes cut into landscape fabric, after which the fabric is typically covered with mulch. While this practice may be highly effective for weed control, it likely reduces nesting opportunities for ground-nesting pollinators and other wildlife. Hedgerows should be installed without, or with minimal, landscape fabric when possible.

- > Amendments: Most native plants are adapted to a variety of soil conditions and do not need any specific amendments. However, in areas where the soil is compacted, degraded, or depleted, compost should be used during planting. Compost should be free from weed seeds, aged properly, and mixed thoroughly with soil in the holes during planting. Where rodent damage may occur, underground wire cages around roots are recommended. Plant guards also may be needed to protect plants from above ground browsing or antler damage by deer. Newly planted areas should be clearly marked to protect them from mowing and herbicides.
- ➤ Plant size: Consider size at maturity when planting. Most woody shrubs can be spaced on 4- to 10-foot centers and most herbaceous plants spaced closer on 2-to 3-foot centers. It is helpful to measure the planting areas prior to purchasing transplants and to stage the transplants in the planting area prior to installing them in the ground.

- > Transplanting: Transplanting often occurs in the spring, but can happen anytime the ground can be worked. It should be timed to avoid prolonged periods of hot, dry, or windy weather. In drier regions, it is important to plant early to allow root growth before the summer. Regardless of when planting occurs, however, the transplants should be irrigated thoroughly immediately after planting. Holes for plants can be dug and pre-irrigated prior to planting as well. Some woody native shrub and tree cuttings, commonly called slips, can be planted directly into the ground. Specific species readily root and can be planted in the fall before the rainy season.
- > Irrigation: In most areas that do not receive abundant fall and winter rains, native and drought-tolerant woody plants should be irrigated with at least one inch of water per week (except during natural rain events), for the first two years after planting. Long, deep watering is best to encourage deep root system development. Shallow irrigation should be avoided. Drip irrigation is useful, although it may be cost-prohibitive in large buffer areas. Other methods that allow for deep watering can also be successful. It is advisable to irrigate at the base of plants and avoid overhead irrigation that would encourage weed growth. Plugs are more amenable to drip irrigation, but drip lines with closely spaced emitter holes can be used for irrigation of native annuals. Once plants are established, irrigation should be removed or greatly decreased. In areas with very little precipitation, irrigation may be needed for the lifespan of the buffer. Non-native plants may require more frequent irrigation, and may still require supplemental irrigation once established.
- > Mulching: To reduce weed competition and retain moisture during the establishment phase, plantings should be mulched. Recommended materials include wood chips, bark dust, weed-free straw, nut shells, grapeseed pomace, or other regionally appropriate weed-free mulch materials.
- > Mowing: Mowing is a good method to control weeds during buffer establishment and for long-term maintenance. Mow weeds when they are flowering to prevent weed seed formation. Set mower height above the establishing herbaceous buffer plants (8" or higher) to prevent injury to them. This should be done during a time when birds and other desirable wildlife are not nesting. If the buffer/hedgerow has no understory, mow close to the ground.

Long-Term Maintenance of Buffers

Buffer zones require maintenance, and the type of maintenance depends on what has been planted and its location. The most important maintenance considerations are irrigation, weeding, and replacing dead plants. An important component of reducing plant mortality in the buffer zone is making sure workers know which plants are "keepers". Flag or stake the plugs and transplants so that workers can differentiate buffer zone plants from weeds and don't destroy them by hoe, weed-wacker, mowing, mulching, or flaming.

- ➤ Irrigation: Long-term irrigation needs will vary greatly based on geography. In California, for example, native woody plants and perennials generally require two to three years of irrigation to insure their long-term survival. Drip irrigation is usually sufficient, and longer, deeper watering intervals will support deeper root penetration. As stated above, in regions with very little precipitation, irrigation may be needed for the lifespan of the buffer. Use of overhead irrigation will likely encourage weed growth and may interfere with weed management practices.
- ➤ Weed management: As noted earlier, reducing weeds on a planting bed is very important. Use of plastic collars can protect young trees from grazing, weed competition, and inadvertent mowing. Hand weeding is more commonly used on buffer zones that have used mulch. Use of weed barrier cloth reduces the need for hand weeding in buffer zones. In areas that do not contain flammable mulch, hand-held flamers can provide efficient weed control if used when weeds are young (under three inches). As flaming does not involve disturbing the soil, it does not bring up additional weed seeds into the germination zone. Grasses are more difficult to control with flame weeding, as their growing tips are protected.
- ➤ **Grazing**: Grazing can be used to manage buffers, but should be done with a good understanding of the forage preferences of the grazing animal, and a plan for moving the animals before any damage occurs to the buffer. Temporary fencing may be needed to prevent access of grazers to crops or to sensitive riparian areas. Grazing should not take place when the soil is wet, when buffer plants are seedlings or setting seed, when plant cover is sparse, or when plants are stressed from drought.

- ➤ **Burning**: Burning can sometimes revitalize grassy buffers by getting rid of old thatch and providing more space for some of the native plants. Mowing is another way that a buffer zone can be revitalized and, as mentioned above, both should be done in blocks to minimize disturbance of wildlife.
- ➤ **Replacements**: When planting perennials, it's to be expected that some small percentage of the plants die. These skips should be replanted as soon as possible to prevent weeds from filling the gap.
- ➤ Food Safety: As mentioned previously, deer, rabbits, ground squirrels and other animals may use the buffer zone for food and habitat. In some cases this may result in food safety concerns as animals may enter crop production areas and leave scat. However, buffer zones can help to address other food safety concerns such as the use of filter strips to prevent irrigation water contamination. As rules under the Food Safety Modernization Act (FSMA) are finalized and implemented, producers will need to be aware of these issues.



Figure 9. This double row of deciduous trees on a small organic farm in Washington provides a buffer from the neighboring farm, acts as a windbreak, and provides shade for workers and nesting habitat for birds.

Appendix A. Seed Suppliers and Plant Lists

General and Multi-State

NRCS Electronic Field Office Technical Guide locator (eFOTG).

http://efotg.sc.egov.usda.gov/efotg_locator.aspx?map=

Native Plants Database (Lady Bird Johnson Wildflower Center). The Xerces Society has collaborated with the Lady Bird Johnson Wildflower Center to create lists of plants that are attractive to native bees, bumble bees, honey bees, and other beneficial insects, as well as plant lists with value as nesting materials for native bees. These lists can be narrowed down with additional criteria such as state, soil moisture, bloom time, and sunlight requirements.

www.wildflower.org/collections

Native Seed Network. Resource to link buyers and sellers of native seed by geography. The site includes information about the use of native plants, seed selection and other resources.

www.nativeseednetwork.org

Pollinator Conservation Resource Center website provides information on pollinator plant lists, conservation guides, pesticide protection, seed venders, nurseries, and more. Xerces Society.

www.xerces.org/pollinator-resource-center

Technical References: Plant Fact Sheets, Plant Guides and Technical Notes (USDA-NRCS)

www.id.nrcs.usda.gov/programs/tech_ref.html

USDA Plants Database

http://plants.usda.gov

California

Native Plant Nurseries and Native Seed Suppliers, California, Sam Earnshaw, 2004 in *Hedgerows for California Agriculture: A Resource Guide.* Community Alliance with Family Farmers. 70 p. (Appendix A, page 26. Plants Suitable for Various Regions [in CA], and Appendix E, pages 44-6, Nurseries & Seed Companies) http://caff.org/wp-content/uploads/2010/07/Hedgerow_manual.pdf

NRCS Plant Material Center

PO Box 68/ 21001 N. Elliott Rd. Lockeford, CA 95237 209-727-5319 Margaret.Smither-Kopperl@ca.usda.gov

Appendix B.

Classes of Organic Herbicides

(Webber et al. 2008)

The **Organic Materials Review Institute (OMRI)** maintains lists of generic materials and trade names of materials, including herbicides, registered for use on organic operations. For more information, see: www.omri.org

Corn Gluten Meal (CGM), a byproduct of the wet-milling process of corn, and Mustard Meal (MM) are phytotoxic. The non-selective preemergence, or preplant-incorporated, herbicides CGM and MM inhibit root development, decrease shoot length, and reduce plant survival of weed and crop seedlings. Research has demonstrated that CGM can be effectively used for weed control with established turf, transplanted vegetables, and, if precisely applied to provide a CGM-free planting strip, for direct-seeded vegetables. It is essential to understand that as non-selective herbicides, CGM and MM can injure or kill germinating and emerging crop seedlings. Crop safety is greater when these substances are applied to established perennial plants. Initial research with MM has shown similar application and weed control potential as CGM. Although CGM and MM can provide effective early preemergence weed control of germinating weed seeds, supplemental weed control measures will be required to control escaped weeds, established perennial weeds, or weeds emerging in the mid-to late-growing season. CGM and MM must not be derived from genetically modified organisms (GMO) to be cleared as potential organic materials. MM can cause extreme dermal reaction in humans and should be used with suitable protective equipment.

Vinegar. There are a number of organically approved products that contain vinegar (i.e., 5%, 10%, and 20% acetic acid). Vinegar (acetic acid) is a non-selective contact herbicide. In general, weed control increases as acetic acid content and application volume increase (i.e., 20, 40, 80, and 100 gpa). Typically, vinegar is less effective in controlling grasses than broad leaf weeds and more effective on annual species than perennials. In addition to application volumes and concentration, weed control is also dependent on the weed size and the species. Carpetweed (Mollugo verticilata l.) is very sensitive to

acetic acid at very low concentrations and application volumes, while yellow nutsedge (Cyperus esculentus l.) is able to tolerate high acetic acid concentrations and application volumes. Repeated applications of acetic acid may be necessary for satisfactory weed control depending on weed size, weed species, and whether it is an annual or perennial plant. There is also a difference between nonsynthetic and synthetic acetic acid and approval for use in organic production. If the material is intended for use on certified organic land, check for approval of your specific product with your organic certifying agency. Also keep in mind that clearance for organic use does not mean a product cannot cause personal injury, if handled in an unsafe manner. Vinegar with greater than 10% acetic acid can cause severe eye damage or even blindness.

Clove Oil. Clove oil is the active ingredient in a number of organically approved postemergent non-selective herbicides. Clove oil weed control efficacy can be as good, or better than acetic acid herbicides, and can be applied at lower application volumes and remain effective. As with acetic acid and other contact herbicides, broadleaf weed control, in general, is greater than grass weed control. There is evidence that adding certain organically approved adjuvants (i.e., garlic and yucca extracts) will increase weed control with clove oil.

D-Limonene, Orange Oil and Lemongrass Oil.

These are all contact, post-emergent herbicides. As with acetic acid and other contact herbicides, control of broadleaf weeds is greater than grass weed control. Adding an organically acceptable adjuvant may result in improved control.

Ammonium Nonanoate or Ammonium Pelargonate.

This is another non-selective contact post emergent herbicide that has shown excellent weed control activity and has just recently received clearance as an organic herbicide. Ammonium nonanoate occurs in nature and is formed from the biodegradation of higher fatty acids. Ammonium nonanoate is more effective on broad leaf weeds than grasses and smaller or younger weeds than larger or more mature weeds. Ammonium nonanoate can be effective at more application volumes than acetic acid products.

Appendix C. References

Adamson, N., T. Ward, M. Vaughan. 2011. **Windbreaks Designed with Pollinators in Mind**. Inside Agroforestry Journal, pages 8-10. An overview of multi-purpose windbreaks designed with pollinator-friendly trees and shrubs.

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Molinar, Richard. 2013. Personal communication about use of 1 ml, non-UV-stabilized plastic for soil solarization.

Pendergrass, K., M. Vaughan, J. Williams. 2008. **Plants for Pollinators in Oregon.** USDA-NRCS Technical Note, Plant Materials No. 13. This publication describes the biology and habitat needs of native bees and other beneficial insects. An extensive and detailed list of plant species is included on pages 15-20.

http://plants.usda.gov/pollinators/Plants_for_ Pollinators_in_Oregon_PM%2013.pdf

Webber III, C.L., J.W. Schrefler, L.P. Brandenberger, W.C. Johnson III, A.R. Davis, M.J. Taylor, and R.A. Boydston. 2008. Current Substances for Organic Weed Control in Vegetables or What Do We Have in Our Organic Weed Control Toolbox?

http://naldc.nal.usda.gov/download/45465/PDF

Xerces Society for Invertebrate Conservation.

Conservation Cover (327) for Pollinators: Specifications and Implementation Requirements. Draft 2013.

www.xerces.org/pollinator-conservation/agriculture/
pollinator-habitat-installation-guides

Xerces Society for Invertebrate Conservation.

Hedgerow Planting (422) for Pollinators: Specifications and Implementation Requirements. Draft 2013.

www.xerces.org/pollinator-conservation/agriculture/
pollinator-habitat-installation-guides

Xerces Society for Invertebrate Conservation. **Pollinator Conservation Resource Center** website provides additional information on pollinator plant lists, conservation guides, pesticide protection and more. www.xerces.org/pollinator-resource-center

Xerces Society Pollinator Program,

Seed Mix Calculator

Develop your own pollinator conservation seed mix using this seed rate calculator.

www.xerces.org/wp-content/uploads/2009/11/XERCES-SEED-MIX-CALCULATOR.xls

Yolo County Resource Conservation District, **Bring Farm Edges Back to Life!** 2001.

This landowner handbook gives clear instructions for establishing hedgerows, seeding native grasses, and applying other conservation practices.

www.yolorcd.org/nodes/resource/publications.htm

EXHIBIT E

Odor Control Plan

Project Description: Medical Cannabis Land Use Ordinance Operating Standards (26-88-254(g)).

Odor Control Plan

This odor mitigation program has been designed to provide guidance in the identification and documentation of odors through the implementation of odor mitigating equipment and through the utilization of self-inspections.

The Odor Management Plan is intended to become an integrated part of daily operations at Petaluma Hills Farm LLC to effect diligent identification and remediation of odors generated by cannabis cultivation. Furthermore, odorous emissions are a nuisance to employees, operators and other staff that work on-site. Odor control provides a more pleasant work atmosphere for those individuals as well as complies with the regulatory framework.

The transmission of odor depends on a number of variables. To ensure proper odor mitigation, Petaluma Hills Farm LLC will utilize odor-reducing equipment such as HVAC, carbon filters, and odor neutralizers.

All cannabis rooms will be equipped with carbon filters and multiple fans to mitigate cannabis odor. Carbon filters pull odor out of the air and neutralize odors that pass through the room. An industrial level fan will be placed next to the Carbon filters to push the air into the filter. Air will be pulled out of the FLOWER/VEG room when CO levels reach at or above 2000 PPM, and draw from the lower portion of the room. A passive intake of air that will pass by a light trap, air filter, and backdraft damper will be used. The passive intake of air will prevent odorous air from leaking out of the room. Additionally, carbon filters for filtration of mold/mildew spores and plant odors.

Furthermore, all cannabis is restricted to the production facility or the inventory room of the facility, reducing the risk of odor mitigation.

Odor Inspections

Odor inspections are required to be performed on a daily basis. The intent of the daily inspection is to ensure that all odor mitigation equipment in the facility is working as intended and to ensure there is no off-site odor.

The inspection will consist of one or more of these individuals touring both the facility outside perimeter and the interior of the facility and rating the odor level from 1 through 4 ($1 = No \ odor, 2 = minimal \ odor, 3 = noticeable \ odor, and 4 = significant \ odor)$. The inspection will also include a review of all odor mitigation equipment.

While odor is subjective, it is imperative that odor be measured objectively. Measurement of odors is most often done to determine the strength of an odor. On a semi-annual basis, Petaluma Hills Farm LLC will utilize a third party to perform an odor intensity and concentration test. The onsite manager is responsible for continuous monitoring of odor throughout the facility, and is required to complete odor inspections on a daily basis.

Odor Complaint Investigation

Our main goal as a company is to be a good neighbor and a contributor to the County of Sonoma community. If Petaluma Hills Farm LLC receives any real-time odor complaints from neighbors, we will investigate those immediately. Upon receipt of an odor complaint, the following actions will be taken:

- 1. Employee to log complaint in the Odor Mitigation Log Complaints.
- 2. Manager to investigate the complaint immediately after notification.
- 3. Manager to log the results and outcome of the investigation in the Odor Mitigation Log.
- 4. Manager to follow-up directly with the complainant.

Training

All employees are trained on the Odor Mitigation Plan and are required to clean spills immediately.

If odor mitigation is found to be ineffective, another internal odor mitigation method will be used. In the case that the odor issue cannot be resolved internally, outside experts will be utilized until the facility is successful in controlling the odor.

EXHIBIT

Draft Resolution

Resolution Number

County of Sonoma Santa Rosa, California

April 11, 2019 UPC17-0020 Crystal Acker

RESOLUTION OF THE BOARD OF ZONING ADJUSTMENTS, COUNTY OF SONOMA, STATE OF CALIFORNIA, ADOPTING A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING PROGRAM AND GRANTING A USE PERMIT TO PETALUMA HILLS FARM, LLC, FOR PROPERTY LOCATED AT 334 PURVINE ROAD PETALUMA, CA 94952; APN 022-230-020.

WHEREAS, the applicant, Petaluma Hills Farm, LLC. c/o Samuel Magruder, filed a Use Permit application with the Sonoma County Permit and Resource Management Department for a commercial cannabis operation including 8,096 square feet of mixed light cultivation, 2,880 square feet of indoor cultivation, 28,560 square feet of outdoor cultivation (total cultivation area of 39,536 square feet), 4,080 square feet of indoor propagation, and associated processing on site-grown cannabis located at 334 Purvine Road Petaluma, CA 94952; APN 022-230-020; Zoned Land Extensive Agriculture (LEA), B6 100, Accessory Dwelling Unit Exclusion (Z); Supervisorial District No 2; and

WHEREAS, a Mitigated Negative Declaration was prepared for the Project and noticed and made available for agency and public review in accordance with the California Environmental Quality Act ("CEQA") and the State and County CEQA Guidelines; and

WHEREAS, in accordance with applicable provisions of law, the Board of Zoning Adjustments held a public hearing on April 11, 2019, at which time the Board of Zoning Adjustments heard and received all relevant testimony and evidence presented orally or in writing regarding the Mitigated Negative Declaration and the Project. All interested persons were given an opportunity to hear and be heard regarding the Mitigated Negative Declaration and the Project; and

WHEREAS, the Board of Zoning Adjustments has had an opportunity to review this Resolution and finds that it accurately sets forth the intentions of the Board regarding the Mitigated Negative Declaration and the Project.

NOW, THEREFORE, BE IT RESOLVED that the Board of Zoning Adjustments makes the following findings:

- Based upon the information contained in the Initial Study included in the project file, it
 has been determined that there will be no significant environmental effect resulting from
 this project, because mitigation measures and a mitigation monitoring program have
 been incorporated into the project as Conditions of Approval. The Mitigated Negative
 Declaration has been completed in compliance with CEQA State and County guidelines,
 and the information contained therein has been reviewed and considered.
- 2. As discussed in the Staff Report for the project, the proposal is conditionally consistent with the General Plan Policies for managing and conserving agricultural areas, and preserving areas of agricultural character. The project does not increase residential density, nor does it displace other agricultural activities. A majority of the subject parcel is used for cattle grazing; the proposed project only uses a minor portion of the parcel.

- 3. The proposal is consistent with the Land Extensive Agriculture (LEA) Zoning District, in that the proposed cannabis cultivation operation is allowed with approval of a Conditional Use Permit. The purpose of the LEA District is to enhance and protect lands best suited for permanent agricultural use but capable of relatively low production per acre of land. The proposal maintains the agricultural grazing use of the majority of the land (25 acres; 68% of the total land area) and does not facilitate residential use.
- 4. The establishment, maintenance, or operation of the use for which application is made will not, under the circumstances of this particular case, be detrimental to the health, safety, peace, comfort, and general welfare of persons residing or working in the area of such use, nor be detrimental or injurious to property and improvements in the neighborhood or the general welfare of the area. The particular circumstances in this case are: (1) The cannabis operation would not involve more than one acre of cannabis cultivation area; 2) All cannabis cultivation areas are greater than 100 feet from property boundaries and greater than 300 feet from adjacent off-site residences; 3) The project parcel is greater than 10 acres (37.02-acres); 4) All cannabis cultivation areas will be screened from public view from Purvine Road and Spring Hill Road; 5) Security measures will be implemented to uphold the health, safety, peace, comfort, and general welfare of persons residing or working in the neighborhood of such use; 6) All equipment shall be in compliance with the General Plan Noise Standard; 7) Outdoor cultivation activities (except for harvest) will be limited to daylight hours. Deliveries and shipping operations will be limited to the hours of 8:00 am to 5:00 pm Monday through Friday; 8) All cultivation lighting will be contained within the mixed light structure; exterior lighting downward casting and fully-shielded; 9) Hazardous materials will be stored in accordance with local, state and federal regulations; 10) All energy will be 100% renewably sourced; 11) No public access or retail sales are permitted.

BE IT FURTHER RESOLVED that the Board of Zoning Adjustments hereby adopts the Mitigated Negative Declaration and Mitigation Monitoring Program set forth in the Conditions of Approval. The Board of Zoning Adjustments certifies that the Mitigated Negative Declaration has been completed, reviewed, and considered, together with comments received during the public review process, in compliance with CEQA and State and County CEQA Guidelines, and finds that the Mitigated Negative Declaration reflects the independent judgment and analysis of the Board.

BE IT FURTHER RESOLVED that the Board of Zoning Adjustments hereby grants the requested Use Permit, subject to the Conditions of Approval in Exhibit "A", attached hereto.

BE IT FURTHER RESOLVED that the Board of Zoning Adjustments designates the Secretary as the custodian of the documents and other material which constitute the record of proceedings upon which the Board's decision herein is based. These documents may be found at the office of the Sonoma County Permit and Resource Management Department, 2550 Ventura Avenue, Santa Rosa, CA 95403.

BE IT FURTHER RESOLVED that the Board of Zoning Adjustments' action shall be final on the 11th day after the date of the Resolution unless an appeal is taken.

THE FOREGOING RESOLUTION was introduced by Commissioner , who moved its adoption, seconded by Commissioner , and adopted on roll call by the following vote:

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Commissioner Commissioner Commissioner Commissioner Commissioner

Ayes: Noes: Absent: Abstain:

WHEREUPON, the Chair declared the above and foregoing Resolution duly adopted; and SO ORDERED.