

Attachment 3

Property Management Plan

For

Flying O Farm

Cultivation Operations

Project Name: Flying O Farm

Project Location: 11540 Bachelor Valley Road, Witter Springs, CA 95493

Risk Level: Tier 2, Low

Client: Alex Rashed

Prepared By: Kyle Geitner, Principal Consultant

Date: 4/1/2024

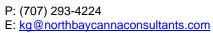


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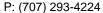


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Project Overview

Existing Conditions

The existing conditions of the project site includes one cabin, two main residences, one garage and five barns. The site is mainly undeveloped and is covered with native grass, pasture land, and a few trees. Per the Envirostor website and the State's GeoTracker database, there are no known historic sources of contamination at the site or within 10,000 feet of the project site. The aforementioned project's proposed cannabis cultivation water source will be a well located on the property just southeast of the cultivation area. The well has an estimated yield of 15 gpm per the well test conducted by Pollack Sons & Pump on April 11, 2022. The project site's sheet flow currently flows in a south-westerly direction towards Cooper Creek. Stormwater is conveyed through surface runoff and flows across natural vegetation creating a vegetative buffer between discharge area and watercourses. Stormwater discharge at all locations on the site are not considered direct discharges into the creek, as defined by the State Water Board. The property varies in slope, ranging from 0%-20%. The project parcel ranges in elevation from 1380-1470 feet above mean sea level (Information derived from Google Earth). The location where cannabis cultivation will occur slopes roughly at 0%-6%. Existing site vegetation, topography, drainage patterns, stormwater conveyance systems, and watercourses are shown on the Overall Site Plan submitted to the County of Lake.

The area that will be utilized for the proposed cannabis operation consists of Still loam, stratified substratum. The site is underlain by loam and clay loam. The Soil Analysis reference for the proposed cultivation area can be found in Appendix B.

Proposed Conditions

The project is proposing 43,560 square feet of outdoor cannabis cultivation on the subject parcel. This project proposes minor site improvements to ensure that the cultivation site meets all local and state regulations and guidelines. The proposed improvements consist of minor road improvements and installation of security fences, security system, employee parking, trash bins, storage sheds, portable toilets, etc. Outdoor cannabis plants are to be grown in-ground in rows that are 4-feet wide and 418-feet in length. The limits of the canopy and cultivation area are shown on the Overall Site Plan in Appendix A.



Section 1 Air Quality

1.1 Summary

Flying O Farm shall not degrade the county's air quality as determined by the Lake County Air Quality Management District (LCAQMD). The Air Quality Management Plan (AQMP) is designed to promote the health, safety, welfare; environmental quality, and reduce potential for nuisance. Flying O Farm plans on cultivating organically, using teas and preventative pest management strategies. These strategies include companion plants along with predator insect defense introduction. The cultivation project anticipates generating a minimal amount of air pollution or particulates. Flying O Farm does not anticipate causing odor pollution nor receiving odor complaints and if for some reason. Flying O Farm does receive complaints, the appropriate measures will be taken to reduce odor pollution.

1.2 Role of Responsible Party

Alex Rashed will be personally responsible for responding to any complaints by neighbors. Flying O Farm will supply neighboring landowners with the most appropriate contact information for Flying O Farm, where they can respond immediately to complaints.

1.3 Odor, Air Pollution, and Particulates Reduction Measures

Flying O Farm's project anticipates the following sources of odor and particulate pollutants to be as follows:

- Dust from gravel/dirt road and cultivation site;
- Emission from gas powered farm equipment;
- Cannabis odor from curing/drying facility and cultivation site when flowering.

DUST FROM GRAVEL/DIRT ROADs (BMPs)

Flying O Farm understands that unpaved roads can be a potential source of air pollutants. This problem generally occurs during the dry season from May through October. Flying O Farm will mitigate particulate matter from entering the air from vehicles of visitors or employees. The property road will be well maintained and monitored regularly for quality of its surfacing. Possible mitigation measures for reducing particulate matter produced by gravel road travel includes, but is not limited to the following:

- Hiring a water truck as needed to wet the road surface and reduce particulate generation;
- Reducing the amount of travel on gravel roads through efficient management and enforcing strict speed limits on all road on property;
- Consolidate activities like solid waste removal and supply deliveries to as few per possible per week.

EMMISION FROM GAS POWERED FARM EQUIPMENT (BMPs)

In order to mitigate potential effects on air quality from the below named farm equipment, Flying O Farm will ensure that this equipment is used on a minimal basis and all equipment is properly maintained to



ensure efficient operation. Flying O Farm will store equipment in a designated area to ensure equipment is properly stored and not exposed to any environmental hazards. The responsible party will ensure they obtain Authority to Construct Permit pursuant to LCAQMD Rules and Regulations to operate equipment which may cause any air pollution if needed, prior to construction. The responsible party shall maintain Authority to Construct Permit to Operate until the completion of the project. Flying O Farm expects to use the following equipment, which could impact air quality, for cannabis cultivation related activities:

- Possible Tractor
- Gas powered woodchipper
- Gas powered chainsaw
- Gas powered weed eater
- · Gas powered brush cutter
- Gas powered lawnmower
- Etc.

CANNABIS ODOR FROM CURING/DRYING FACILITY(BMPs)

In rooms where cannabis is handled, dried, cured and generally processed, the atmosphere will be scrubbed using in-line fans that have been coupled to filters that contain activated carbon. Activated carbon is the industry standard for the elimination of cannabis odor. Additional HEPA filters will be installed and used to eliminate any harmful bacteria and/or particulates that may be present in facility. Flying O Farm will log and maintain accurate records, repairs and replacements of the ventilation and odor mitigation systems and will retain records.

1.4 Odor Response Program

Alex Rashed will be designated as the responsible party for odor complaints. He will be trained to take the following steps in response to an odor complaint. Alex Rashed will be available to respond to odor complaints 24 hours a day/ 7 days a week. The responsible party shall ensure that all property owners and residents located in a 1,000-foot radius of the cannabis facility will have the responsible party's contact information. Should an odor complaint be received regarding the project operations:

- The responsible party will respond as soon as possible or within 12 hours of receiving the complaint to discuss the issue, recording time, date, and person(s) affected;
- If the responsible party believes that the odor drift was caused by the wind, he will stop operations for one
 hour until the odor sufficiently dissipates or until the direction of the wind changes, at which point he will restart
 operations;
- If the complaint occurs for a second time in a period of 8 hours, he will halt operations for the remainder of the workday. In the case that the odor is the result of the receiving or storage of compost, Flying O Farm will follow the following practices:
 - > Consider blanketing the compost with non-odiferous material;
 - > Expedite the receiving process; and



> Check filters and air quality BMPs.

ADDITIONAL ODOR MITIGATION PRACTICES FOR OUTDOOR CULTIVATION is to plant hedge rows of native flowering shrubs with coinciding flowering cycles to cannabis, if deemed necessary to combat odor pollution. Development of misting system which serves to increase ambient humidity in the cultivation site and reduce offsite odor drift.

1.5 Reporting and Monitoring

Flying O Farm will monitor and document the performance of the Air Quality Management Plan (AQMP) implemented at the premises. On an annual basis, Flying O Farm will review all documentation pertaining to the performance of the Air Quality Management Plan as to determine if the risk of nuisance odors are within acceptable tolerances or ranges; or can be mitigated further by implementing new best management practices or advanced technology and mechanical systems.

The designated responsible party, Alex Rashed, will review all procedures in the AQMP once a year, or as needed; and he will take action to ensure full compliance with local, state, and federal regulations that pertain to air quality management. All data and information will be made available to Lake County Community Development Staff, and the Lake County Air Quality Management District (LCAQMD) as required or upon request.



Section 2 Cultural Resources

2.1 Summary

A Cultural Resource Study was conducted at 11540 Bachelor Valley Road, Witter Springs, CA 95493, on January 17th, 2020 by Dr. John Parker of Wolf Creek Archelogy. The surveyed area consisted of approximately 17 acres, encompassing the proposed cultivation areas on Flying O Farm on the subject parcel. No cultural resources were discovered within the project boundaries. However, a significant historic structure (the 1868 John Boone Howard Ranch House) was observed and recorded. The historic ranch house does meet the State Requirements to be considered a "significant" historic resource. In addition, any associated cultural features related to the ranch house and its history would also be considered historically significant. It is recommended that the project be approved as planned with a stipulation that the ranch house and its immediate surroundings (50 feet) be avoided by any ground disturbance or staging activities related to the proposed project. This project follows these guidelines as there is no proposed improvements within the historic vicinity. There were also letters sent out to all the local reservations and tribes associated with this location and given a month to respond. There was no record of any archeological resources found on the parcel (APN: 002-024-22 including the proposed cultivation area. The Cultural Resources Study (CRS) is intended to protect the cultural, historical, archaeological, and paleontological resources on the lot of record where the permitted activity is located. In-line with the goals of Lake County, Flying O Farm's CRS includes measures to monitor and evaluate the performance of the cultivation project, as well as ensure that all data and information is reported or available upon request to local or state agencies.

2.2 If Cultural Resources are Discovered (BMPs)

All activities in the vicinity of the find(s) will be temporarily ceased;

- Contact will be made with a qualified archeologist to evaluate the find(s) and to recommend mitigation
 procedures, if necessary. All evaluation and mitigation procedures to be in accordance with Section 15064.5
 of the California Environmental Quality Act and per Dr. John Parker recommendations.
- Local tribes will be contacted regarding the potential of such resources being located on the lot of record.

Flying O Farm does not expect any expansion to the cultivation site; however, before any expansion of the current site or development of the property is commenced, a revised Cultural Resource Study will be provided to analyze the expansion areas.



Section 3 Energy Usage

3.1 Summary

The energy usage applies to all operations performed at Flying O Farm's cultivation site and that consume energy resources. This includes the usage of all machinery used during cultivation, processing, and packaging of cannabis.

The primary goal and objective for the EMP is to establish reliable baseline metrics and benchmark standards for the performance and efficiency of Flying O Farm's cultivation site. The Energy Management Plan will track the consumption of:

- Electricity;
- Gasoline and Diesel Fuel.

All employees are required to follow the procedures outlined in this plan. Any deviations from this plan must be immediately brought to the attention of Alex Rashed.



Energy Calculation 3.2

The following is energy calculation for the proposed (1) A-Type 3 Outdoor License:

Appliance	Number in Use	Watts/Unit	Hrs./Day	Total Watts/day
Dehumidifier	0	400	8	0
LED Grow Lights	0	0	6	0
Whole Space AC	0	3500	4	0
Refrigerator	0	77	24	0
Computers	1	120	5	600
Stereo	1	60	4	240
Fans	0	100	4	0
Vacuum	0	650	.5	0
Wireless Router	1	7	24	168
Coffee Maker	0	1500	.5	0
Phone Charger	0	5	10	0
Printer	1	45	.5	22.5
Security System	1	450	24	10800
Water Pump	2	2000	2	8000
TOTAL WATTS PER DAY	19,830.50	•	1	1
KWh/DAY	19.8			
KWh/MONTH	594.91			



3.3 Energy (BMPs)

Flying O Farm will implement the following best management practices:

- Provide employees with guidelines for efficient practices;
- Minimize use and turn off lights and unnecessary electronics;
- Use energy efficiency features in all technology;
- Aim for new construction to be net zero energy; and
- Non-peak use of pumps, motors, and other energy sources.

ENERGY MANAGEMENT (BMPs) To develop and implement an effective Energy Management Plan,

Flying O Farm will:

- Log and maintain electricity, natural gas bills and fuel consumption for five years;
- Establish goals for energy conservation;
- Maintain accurate recordkeeping as to the cultivation/production; and
- Adjust strategies as needed to meet energy conservation goals.

ALTERNATIVE ENERGY

Flying O Farm plans to install a solar array at its grow site by August 1, 2024. Flying O Farm shall operate at 42% renewable energy by Jan 1, 2026. More information will be updated to Property Management Plan upon site visit with solar panel company.

3.4 Energy Conservation Measures

Due to global climate change increasing the concern for public health and environmental impact, California has enacted laws to offset greenhouse gas emissions. As recommended by the Department's Literature Review on the Impacts of Cannabis Cultivation, the cultivator is required to show evidence of carbon offsets. Flying O Farm will be in compliance with CCR Title 3, Division 8, Chapter 1, Section 8305. This project proposes being 50% solar powered energy for cultivation purposes by summer 2025.

3.5 Reporting and Monitoring

Flying O Farm is committed to benchmarking and reducing energy consumption relative to the site's expansion and annual consumption goals. To set a benchmark, analysis will be performed on the following:

- Machinery required for the cultivation of and their efficiency;
- Energy saving alternatives to machinery;
- Operational procedures

The result of energy monitoring readings shall be recorded on standard monitoring data forms. All data and information will be reported to Lake County Community Development (CCD; and other interested licensing or regulatory agencies).



Section 4 Fertilizer Usage

4.1 Summary

Flying O Farm approaches soil fertility from an organic and biological perspective. Flying O Farm plans on using compost soil from "Biologic System Gold Soil". Flying O Farm will use good biologically active compost, and extracts made from compost as the basis for our fertility program. Along with compost, annual soil testing gives a complete view of the mineral balance of the soil. Amendments are added in the spring to adjust mineral balance for the growing season.

To limit infiltration and water quality degradation, Flying O Farm will irrigate and apply fertilizer consistent with the proper application rate and use driplines as the method of application. All application will be at rates that are reasonable for crop, soil, climate, special local situations, management system, and type of fertilizer.

All fertilizers will be stored in their original package and may only be used in strict accordance with the product label requirements including, but not limited to, directions pertaining to application, storage, and disposal of the fertilizer product.

4.2 Fertilizer Application (BMPs)

The following are best management practices used in application:

- Plant cover crop to boost soil fertility and protect from storm events;
- Follow the manufacturer's suggested application rates;
- Contain any spills immediately;
- Do not spray directly on surface water;
- Install straw wattles and maintain vegetation downslope of cultivation site to filter runoff; and
- The use of fertilizer shall not occur within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool.

4.3 Fertilizer Storage (BMPs)

The following are best management practices used in storage:

- Ensure fertilizers are properly labeled and stored to avoid contamination through erosion, leakage, or inadvertent damage from rodents, pests, or wildlife;
- Establish and use a separate storage area for fertilizers;
- Ensure all such storage areas shall comply with the riparian setback requirements, be in a secured location
 in compliance with label instructions, be located outside of areas of known slope instability, and be protected
 from accidental ignition, weather, and wildlife;
- Ensure storage areas have appropriate secondary containment structures to protect water quality and prevent spillage, mixing, discharge, or seepage;
- Store any chemicals in a secure building or shed to prevent access by wildlife;



- Store all products that impact water quality in a manner that does not allow for runoff;
- Segregate acids from water reactive metals such as sodium, potassium, and magnesium;
- Store corrosives on lower shelves at least below eye level and in compatible secondary containers, and will
 not store corrosives on metal shelves; and
- Store dry powder and granular fertilizers in moisture-proof plastic tubs or containers

4.4 Employee Training

Flying O Farm will ensure all employees and managers are trained to adhere to the following best management practices at the cultivation facility. Each employee will be trained on the following:

- Acute, chronic, and delayed effects of fertilizers;
- Routes by which fertilizers can be absorbed by the body;
- Emergency first aid for fertilizer over exposure;
- How to access emergency medical care;
- Decontamination procedures; Spill clean-up;
- How to use Personal Protective Equipment (PPE);
- Safety requirements and procedures for handling, storing, transporting and disposing;
- Fertilizer waste shall not be disposed of on the ground, into or near waterways, or into storm drains, or septic tanks;

4.5 Fertilizers:

Flying O Farm will be Organic Certified. Flying O Farm will only amend the organic bulk soil.

Our Added Amendments to Soil:

- > Bulk Fertilizer
 - Neptune's Seaweed (2% Nitrogen, 3% Phosphorous 1% Potassium)
- Dry Fertilizer
 - o Growmore (16% Nitrogen, 16% Phosphorous, 16% Potassium)
- > Liquid Fertilizer
 - Yara (15.5% Nitrogen, 0% Phosphorous, 0% Potassium)

4.6 Reporting and Monitoring

Flying O Farm will maintain an accurate log of all fertilizers to be used for the cultivation of cannabis. The log will detail the date, fertilizer type, amounts applied, method, the operator applying, and any additional inputs or amendments to the soil. The designated responsible party, Alex Rashed, will review all procedures of fertilizer usage once a year and will take action to ensure full compliance with local, state, and federal regulations that pertain to the usage of fertilizers. Flying O Farm will evaluate the yields for each batch and harvest of cannabis cultivated against the fertilizer inputs.



Section 5 Fish and Wildlife Protection

5.1 Summary

Flying O Farm has created a fish and wildlife protection plan designed to minimize any adverse impact on fish and wildlife and to ensure that the cultivation site and operations performed on site by Flying O Farm is in no way destructive to the local habitat. Flying O Farm conducted a biological survey performed by Alicia Ringstad of Jacobszoon & Associates, Inc. on January 21st, 2020. This survey was conducted with the intent of identifying key stresses and pressures being directly applied to conservation targets because of the cultivation of cannabis at the premises. The results identified no adverse effects on fish and wildlife or habitat regarding the current site or proposed site expansion.

5.2 Habitats on Lot of Record

The lot of record habitats consists of primarily of Harding grass – Reed Canary grass swards and Himalayan Blackberry. The following special-status species were found in the study area: two (2) special-status plant species and six (6) special-status wildlife species. Per the biological survey, the proposed cultivation site does not pose potential to significantly impact the area.

HABITAT DESCRIPTION FOR SUBJECT REAL PROPERTY

Harding Grass – Reed Canary Grass Swards: Phalaris aquatica or Phalaris arundinacea is strongly dominant in the herbaceous layer. Scattered emergent shrubs may be present at low cover, including Baccharis pilularis, Baccharis salicifolia, Ceanothus cuneatus or Salix spp. Herbs < 1.5 m; cover is intermittent to continuous. Many topographic settings, including seasonally wet and alkaline sites. The USFWS/US Army Corps Wetland Inventory (2016 national list) recognizes Phalaris aquatica as a FACU plant and Phalaris arundinacea as a FACW plant. Membership rules: Phalaris aquatica > 15% absolute cover and > 75% relative cover when compared to native species in the herbaceous layer (Evens and San 2004). Phalaris aquatica > 20% absolute cover as the dominant grass in grasslands (Jimmerson et al. 2000). Phalaris aquatica > 50% absolute cover. Other herbs and shrubs occur at low cover including Carex spp., Baccharis salicifolia, and Salix spp. (Buck-Diaz et al. 2012). Phalaris aquatica >



50% absolute cover. Other herbs occur at lower cover including *Bromus* spp. (Buck-Diaz et al. 2012)

Himalayan Blackberry (Riparian Shrub): Ficus carica, Rubus armeniacus or Sesbania punicea is dominant or co-dominant in the shrub canopy. Emergent trees may be present at low cover, including Alnus rhombifolia, Populus fremontii, Quercus agrifolia, Quercus lobata, Quercus wislizeni or Salix laevigata. Shrubs to small trees < 10m; canopy is intermittent to continuous. Herbaceous layer is open to intermittent. Pastures, forest plantations, roadsides, streamsides, river flats, floodplains, fence lines, mesic disturbed areas, and right-of-way corridors. The USFWS Wetland Inventory (2016 national list) recognizes Rubus armeniacus as a FAC+ plant, Sesbania punicea as a FAC plant, and Ficus carica as a FACU plant. Membership rules: Rubus armeniacus > 60% relative cover in the shrub layer (Keeler-Wolf and Vaghti 2000, Hickson and Keeler-Wolf 2007, Klein et al. 2007). Ficus carica > 60% relative cover in the shrub layer (Evens et al. 2014). Rubus armeniacus > 80% relative cover in the shrub layer (Buck-Diaz et al. 2012, Klein et al. 2015).

5.3 Watershed Description

Flying O Farm is located in the Lower Sacramento River Watershed. The cultivation site is greater than 100 feet from any watercourses on the property.

5.4 Impact Mitigation Strategies

Flying O Farm will use the following strategies to maintain our current standing and minimize any future impact on fish and wildlife:

- Be aware of wildlife mating, nesting and migration patterns on property and schedule any construction projects accordingly;
- Survey the areas of impact no more than three days prior to impact or removal;
- Site related work should occur between May 15th and February 15th;
- If work is to be conducted within the breeding season for nesting, a nesting bird survey should take place at least once before any vegetation disturbance or removal take place;
- Protect any active nests with a 50 to 100-foot buffer (species dependent) or exclusion area until the nest is no longer active;
- Perform fueling and maintenance of vehicles and equipment where absorbent spills and clean-up materials
 as well as spill kits are available, and such materials should be disposed of properly after use;
- Flying O Farm shall not disturb aquatic or riparian habitats, such as pools, spawning sites, large wood, or shading vegetation, unless authorized under a CWA section 404 permit, CWA section 401 certification,



- Regional Water Board WDRs (when applicable), or a CDFW LSA Agreement;
- Flying O Farm shall maintain existing, naturally occurring, riparian vegetative cover (e.g., trees, shrubs, and
 grasses) in aquatic habitat areas to the maximum extent possible to maintain riparian areas for stream bank
 stabilization, erosion control, stream shading and temperature control, sediment and chemical filtration,
 aquatic life support, wildlife support, and to minimize waste discharge.

5.5 Reporting and Monitoring

Flying O Farm will monitor biological health of the property every year and conduct a biological assessment in the case of site expansion. Biological assessment reviews will determine if conservation strategies are successful or if changes needed to be applied. Professional services will be rendered for biological assessments if necessary. All data collected by Flying O Farm for the purposes of conservation will be shared and reported to Lake County officials, as well as to the appropriate agency if requested.



Section 6 Operations Manual

6.1 Summary

The Operations Manual is designed to outline the operating procedures of the commercial cannabis cultivation site to ensure compliance with the use permit, protect the public health, safety and welfare, as well as the natural environment of Lake County.

6.2 Authorization to Verify Information

Flying O Farm authorizes Lake County, agents, and employees to seek verification of the information contained within the development permit or use permit applications, the Operations Manual, and the Operating Standards at any time before or after development or use permits are issued.

6.3 Staff Screening Process

Flying O Farm employees will be required to submit fingerprints for a Live Scan criminal history search to be administered but the Lake County Sheriff's Department (LCSD). Potential employee's must be approved by the LCSD to apply for employment. Prospective employees will be asked to submit a formal resume for review which includes education and work history, three professional references, and three personal references. Prospective employees whose applications and references have been approved will be granted a formal interview. The meeting will include presentation on general job description, responsibilities, pay, work schedule, operating procedures, and additional company benefits. Employees will be notified within five business days as to whether they will be hired. Flying O Farm will use an online payroll platform which provides cannabis companies compliance support from the interview process, paychecks, and taxes.

6.4 Hours of Operation

Monday-Saturday, 6am-5pm. Facility will be open to authorized staff, deliveries, and pickups. Facility will be closed to the public.

6.5 Transportation Data

This project proposes having three seasonal employees every year during the growing season. The grow season for employees will range from February till November. The projects estimates 1 commuter vehicle for the employees, making a round trip to the site daily. The project also anticipates one truck to be driven by Alex Rashed (cultivator) making one daily trip. Any deliveries to the project site will be scheduled in advance to minimize daily trips as much as possible. The project has 6 regular parking spaces and two ADA handicap parking space per Article 46.11. Transportation data will be documented and reviewed annually for performance standards and possible methods to reduce daily trips.



6.6 Facility Carbon Footprint

Flying O Farm recognizes that the most sustainable source of power is the sun, and is committed to growing mainly sun grown cannabis, with as little supplemental lighting as possible. Efforts will be made to minimize the use of fossil fuels through adaptation of green technologies, and equipment used that produce emissions will be regularly maintained and adhere to all applicable emissions standards. For outdoor cultivation, Flying O Farm will gradually be switching from grid power to solar power to minimize its carbon footprint.

6.7 Chemical Storage and Effluent Discharge

Flying O Farm uses organic farming practices by only amending the existing soil. Organic farming means that no chemical products are allowed for use in the cannabis facility, and no such chemicals will be stored on site. Nontoxic alternatives to conventional cleaning products and building materials will be sourced and used whenever possible. The facility may use small volumes of chemical sanitation products to maintain a sterile work environment inside any building at the facility. These chemicals will be stored in the manner and location described in the Hazardous Waste section. The project site comes equipped with two accessible permanent bathrooms with a permitted leach field. Any and all effluent will be directed towards the approved leach field. The septic tanks will be inspected annually and pumped every two years to ensure system efficiency.

6.8 Site Maintenance Protocol

When not in use, all Flying O Farm equipment, will be stored in the proper designated area upon completion of the task required. Employees will conduct a daily scan of the site at the end of business, to ensure all materials used during the workday have been returned to designated storage are properly stored. Any refuse created during the workday will be placed in the proper waste disposal receptacle at the end of each shift, or at a minimum at the completion of the assigned task. Any refuse which poses a risk for contamination or personal injury shall be disposed of immediately. The disposal of waste will be in such a manner as to not constitute an attractant, breeding place, or harborage for pests. While Flying O Farm allows grasses and cover crops to grow tall during the rainy season as a soil building technique, when spring seasonal work begins, site will be mowed and trimmed to ensure safe and sanitary working conditions. The maintenance of vegetation will be in such a manner as to not constitute an attractant, breeding place, or harborage for pests.

Roads, parking areas, and yards shall always be maintained to prevent particulate generation and potential illicit discharges of storm water. Adequate drainage features will be installed at the time of construction and gravel surface will be maintained as needed. Rolling dips, out sloping and vegetated swales will be used as potential drainage features if the cultivate site shows signs of poor drainage. If swales are used, infiltration basins will be added to avoid storm water discharge. Crop coverage will be used to contain any source of contamination in areas where cannabis products are handled or transported.



The gradual slope of the proposed cultivation site makes it unlikely that the site will require specialized drainage features. Vegetated ground cover will be established over the entire site as soon as possible, and the site will be surrounded on all sides by a densely vegetated buffer strip capable of absorbing any sheet flow or runoff from the site.

The site has a permitted wastewater treatment facility. The septic system will be maintained to ensure sanitary working conditions, eliminate the possibility of contamination, and protect working and consumer safety. The bathrooms on site are accessible bathrooms. All effluent will be removed from site by a licensed company.

6.9 Planting and Cultivation Plan

The cannabis planting and cultivation plan will include planting for 43,560 square feet of outdoor cannabis cultivation. The outdoor cultivation will be planted in-ground in (26) rows 4-feet wide and 418-feet in length. Upon approval of the major use permit, planting will begin immediately. Outdoor cultivation will occur in February and harvesting will occur in October. The outdoor cultivation plants will occur on one location on the subject property as shown on the Overall Site Plan. Outdoor Cultivation Site will occupy an area of 97,670 square feet with a total outdoor canopy of 43,560 square feet (1.0 acres).

6.10 Reporting and Monitoring

The responsible party, Alex Rashed, will perform a weekly inspection of the cultivation site to ensure the guidelines of the Operations Manual are being carried out successfully, and the notes shall be logged in the Operations Manual, which is to be kept on site. Any poorly performing elements of the system or improper employee conduct will be corrected. If construction of drainage features or construction is required, all necessary permits and approvals will be acquired from the appropriate agency.



Section 7 Pest Management

7.1 Summary

Flying O Farm will be a pesticide-free farm. We use an integrated ecosystem focused strategy that focuses on long-term prevention of pests and damage through a combination of techniques such as biological control, habitat manipulation, and use of resistant varieties. Instead of utilizing chemical pesticides, Flying O Farm will implement proactive systems using beneficial insects to target specifically selected species as well as daily pest scouting to ensure production of the cleanest, purest, high-quality cannabis. Flying O Farm will comply with the California Food and Agriculture (CDFA) code, Division 6 Pest Control Operations and Division 7 Agriculture Chemical; Chapter 1-3.6 and California Code of Regulations, Division 6 Pest Control Operations.

7.3 Pest Deterrence

Flying O Farm practices the following techniques to minimize pest infestations:

- Minimizing dust;
- Releasing predatory mites; and
- Sulfur

PESTICIDE USAGE (BMPs)

In the case, all preferred methods of pesticide prevention and eradication have proven unsuccessful, the following are best management practices for pesticide use at Flying O Farm:

- Follow all labels and directions before, during and after the use of pesticides.
- Chemicals shall be stored in a secure building/shed in a specific location outlined in the Site Plan.
- Any chemical leaks will be handled immediately, and a spill kit will be on site at all times.
- Screens or other measures will be placed in the case of offsite drift.
- Pesticides will not be applied when pollinators are present.
- Pesticides will not be sprayed directly into surface water or when wind is blowing towards surface water bodies;
- Pesticides will not be applied when it can reach surface water or groundwater.
- The use of pesticides shall not be located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool (for purposes of determining the edge of Clear Lake, the setback shall be measured from the full lake level of 7.79 feet on the Rumsey Gauge).
- Use only properly labeled pesticides.
- If there is a spill or accidental discharge in or on any waters of the site, immediately notify the Office of Emergency Services so that the local health officer can decide what actions, if any, may need to be taken to protect public safety HAZMAT SPILL NOTIFICATIONS 1 (800) 852-7550 or (916) 845-8911.



7.4 Worker Protection (BMPs)

In the case of pesticide use, Flying O Farm shall follow the EPA's Agricultural Workers Protection Standard by:

- Providing protections to workers and handlers from potential pesticide exposure;
- Providing training on the safe use of pesticides;
- Providing training on how to avoid exposures to pesticides;
- Training to identify pesticides exposure symptoms and how to respond; and
- Training to manage exposures to pesticides if they occur.

7.5 Reporting and Monitoring

The responsible party, Alex Rashed, will perform a weekly inspection of the cultivation site to ensure the guidelines of Pest Management are being carried out successfully, and the notes shall be logged in the Operations Manual, which is to be kept on site. Any poorly performing elements of the system or improper employee conduct will be corrected.



Section 8 Security

8.1 Summary

Flying O Farm will use best management practices that have been established in the cannabis industry and that pertain specifically to the safe and secure operation of a cultivation site, as well as the secure storage of all cannabis and cannabis products for security. Flying O Farm's security is also compliant with the Emergency Regulations for Cannabis Cultivation, authored by CalCannabis, as well as the regulations established by the California Department of Public Health for state-licensed cannabis businesses. Flying O Farm understands the importance of a secure property and secure cultivation site for the safety of employees and the community.

8.2 Access Prevention

The Cultivation Site will be protected by a 6' wire perimeter fence, with cemented metal posts on 8' intervals. All terminal posts will be set in concrete. The site will be screened from public view by elevation, 90% sunblock mesh and chaparral shrub. The entrance to the site will secured by approximately a 6'6" metal gate and remained locked by a commercial lock, at all times when no staff is present. The driveway to the property has a locked gate at the entrance and there are other lockable gates on the way to the site. There will be no signage with the business name or signage that could otherwise be discerned by the public to indicate cannabis cultivation activities.

The security camera system will record activities within the cultivation site and immediately outside of the site 24 hours per day, 7 days per week. The security camera system will allow for remote monitoring and maintains records for 30 days minimum. The site will also feature a video monitoring system with full view of the cultivation area, infrared capability, motion sensors to alert management of intruders, and the ability to address potential intruders via loudspeakers built into the video monitoring equipment.

The cultivation areas, located inside the fencing, will also remain locked when no staff is present. All access points in and out of the processing facility will be locked by commercial locks and have security cameras recording all entry and exit points into the facility.

VISITOR LOG REQUIREMENTS

Flying O Farm will maintain an employee and visitor arrival and departure log, which contains, the name of the visitor, date and time of arrival and departure, and the purpose of the visit. All logs will be kept in a secured office only accessible by the designated responsible party.



SUSPICIOUS ACTIVITY PROTOCOL

The designated employee will then file a suspicious activity report, noting the time and date of the activity and keep record in a secured room on site. If suspicious activity could result in injury or death of employee(s), the employee(s) will be evacuated from the premises until activity is controlled or intruder is captured.

If suspicious activity is believed to be conducted by a visitor or employee, the designated responsible party will review the tapes and notify the visitor or employee of his/her findings. Depending on the severity of the activity, law enforcement will be notified, and charges will be filed against the individual or party. The person or party will no longer be allowed on property. If the tapes show suspicious activity was perpetrated by an employee, the employee will be asked to leave the premises and relinquish badge and access to the property. If security personnel are necessary on site for the removal of the employee, they will be notified.

8.3 Theft and Loss Prevention (BMPs)

Flying O Farm employees and visitors will be under video surveillance at all times. All cannabis will be stored in a locked, secure room, accessible only to farm management. Other anti-diversion methods include:

Flying O Farm will establish an inventory system that will track any cannabis material and the personnel responsible for processing it throughout the cultivation process. A log will be taken to be able to make rough weight predictions for products. All cannabis will be weighed, documented and logged at each stage of the processing phase, which includes drying, trimming and curing. Each plant and batch of cannabis cultivated will be properly tagged and assigned a unique identification number (UID). In addition to Track-and-Trace, an inventory tracking system will be established to prevent diversion. All in/outs of inventory will be recorded on a log and reviewed every day. These logs will be kept in secured room with extremely limited access.

Supervising tasks or processes with high potential for diversion (including the loading and unloading of cannabis transportation vehicles). Providing designated areas in which personnel may store and access personal items. No visitors will be allowed to the facility, with the exception of local and state agency representatives authorized to act on their behalf. Only employees with scheduled shifts may enter the property; and each employee will be required to have been checked-in properly.

There will designated areas in which personnel may store and access personal items. This area will be monitored for any suspicious activity.



EMPLOYEE VETTING

Flying O Farm will conduct extensive background checks of all employees hired on a full- time or seasonal basis to ensure they are in good standing with the law and do not have a previous history of theft, violence or major offenses. All employees and managers are provided a badge or ID issued by Flying O Farm with required information to be worn when in restricted areas on the farm. All employees must wear their approved Employee Photo ID Badge at all times while at the cultivation site. No access to operational areas of the facility will be allowed to any employee not in possession of or wearing their ID Badge. Any employee who forgets his/her badge should immediately notify a manager to have the shift rescheduled. Only Flying O Farm management team will be granted access to the secure storage rooms and secure storage vaults located on-site.

RESTRICTED AREAS

The restricted areas include the cultivation site, the processing facilities, on-site office and any area with company records, access to security cameras or information related to Flying O Farm. All restricted areas and point of entry and exit on the premises are securely locked using commercial-grade locks.

Flying O Farm prevents the unauthorized entrance into restricted areas within the farm by controlling access to those areas. Limiting access to only certain personnel and for the sole purpose of executing their specific job function and duties. Any person on the premises, except for employees and contractors of the licensee, are escorted at all times by the licensee or at least one employee of the licensee when in the limited-access areas of the premises.

CHAIN OF CUSTODY (BMPs)

While in transit, raw materials and cannabis products are the most vulnerable. In particular, shipping, receiving and finalizing cannabis transactions present a security threat to Flying O Farm cultivation facility.

The following practices, therefore, shall be employed:

- All shipments—incoming and/or outgoing—will occur on a scheduled basis. No unscheduled shipments will
 be received or sent out for delivery.
- Flying O Farm management team will verify the vendor's identity by requesting government-issued ID and
 checking information against a manifest of vendor drivers. Flying O Farm management team will inform site
 supervisor that a vendor is present and escort the vendor into the facility. All shipments will take place in
 areas that are covered by video surveillance.
- All outgoing products will be tracked and documented using the Track-And-Trace system.
- All shipments will be verified against the shipping manifest to ensure the accuracy of the items



received/being distributed - any discrepancy will result in a cancelled transaction.

- All discrepancies will be reported immediately to a member of Flying O Farm management team.
- All discrepancies are to be reported to the appropriate law enforcement, local and state agencies.
- In the case of any theft, Flying O Farm will notify the local law enforcement and/or the state bureau.

8.4 Designated Responsible Party

The designated responsible part is Alex Rashed. The Designated Responsible Party will be responsible for the following:

- Must be available for emergency contact 7 days a week, 24 hours a day.
- Contact information is Phone: (707) 774-1234, Email: realpcs@comcast.net
- Contact information for designated responsible party will be up today. If any changes are made, the Local
 and State Agencies will be notified accordingly.
- The contact information will be provided to the neighbors surrounding the facility.

8.5 Video Surveillance

The facility will be protected by a video surveillance recording system that will monitor the entire perimeter and inside of the cultivation site, inside processing facility, the security fence, and all gates and right-of-ways in order to capture all activity in areas where cannabis is handled, tested, cured, processed or stored. Surveillance will be conducted 24 hours a day, 365 days a year, without interruption.

The site will have a complete digital video surveillance system capable at a minimum of 1080 pixel resolution. All areas recorded by the video surveillance system have adequate lighting to allow the surveillance cameras to effectively record images. The surveillance-system storage device or the cameras are transmission control protocol/ TCP/capable of being accessed through the internet for remote access 24/7. Cameras will be installed in a manner to prevent obstruction, tampering, or disabling.

AREAS THAT SHALL BE RECORDED

- The perimeter of the cannabis cultivation site and cannabis nursery.
- Areas where cannabis products are weighed, packed, stored, quarantined, loaded and/or unloaded for transportation, prepared, or moved within the premises.
- Areas where cannabis is destroyed.
- Limited-access areas.
- Security rooms.
- Areas containing surveillance-system storage devices with at least one camera recording the access points to the storage area.
- Interiors and exteriors of all entry points of the cultivation site and related buildings.
- Cameras will record continuously 24 hours per day at 30 frames per second. All interior cameras (if any) will be moisture proof and all exterior cameras will be water- proof at a minimum I-66.
- All cameras will have color capability, record digitally and be capable of integrating with door alarms. The



video recordings will be digital. Cameras with infrared capabilities will be used for the perimeter fencing. All cameras will include motion activated sensors.

In areas with inadequate lighting for the cameras being used, sufficient lighting shall be provided to illuminate the camera's field of vision or night or infrared cameras will be utilized. The physical media or storage device on which surveillance recordings are stored shall be locked in room in a manner to protect the recording from tampering or theft. Surveillance recordings are kept for a minimum of 30 days and recordings will be kept in a secured room in a controlled environment, separate from the rooms where the computers and monitor system are located. All video surveillance recordings are subject to inspection by the department and can be copied, sent, or transferred upon request. All video surveillance recordings will include a date and time stamp for every recorded frame and are designed to record images in high quality and high resolution to clearly capture revealing facial detail.

8.6 Description of Required Fences

The cultivation site shall be enclosed by a fence. The fence shall include, at a minimum, the following:

- The fence shall have posts set into the ground. The posts may be steel tubing, timber or concrete and may be driven into the ground or set in concrete.
- End, corner, or gate posts, commonly referred to as "terminals posts", must be set in concrete footing or
 otherwise anchored to prevent leaning under tension of stretched fence.
- The fence posts set between "terminal posts" shall be set at intervals not to exceed 10 feet. A top horizontal rail is required between all posts.
- The fence shall be attached to the posts and top horizontal rail.

The fence shall not utilize barbed wire, razor wire, or similar design. The cultivation area shall be screed from the public view. Methods that can be used for screening include, but not limited to, topographic barriers, vegetation, or solid (opaque) fences.

8.7 Information Technology Security (BMPs)

Flying O Farm has developed the following contingency measures to ensure the security of digital records and systems that are vital to the operation of the facility. In the event of flood, fire or theft, these contingencies will allow us to resume operations as soon as operationally possible. All digital records and systems that are vital to Flying O Farm will be backed-up on a weekly basis. The data backup will be stored off-site, on a cloud-based server accessible only to management level employees.

Access to digital records and systems will be highly regulated. No visitors will be allowed in the secure storage areas, operational areas, or any area where digital recordkeeping takes place. Employees will be trained on the importance of maintaining the security of all digital records and systems and will be required to sign a form of acknowledgment testifying that they have been trained, understand, and are



aware of all digital security measures and all access control policies.

8.8 Security Personnel

If Alex Rashed and management deem that outside security personnel are necessary, Flying O Farm will engage a local security company for security personnel to provide security services on the premises when an emergency response is necessary. All security personnel hired or contracted by Flying O Farm comply with Chapters 11.4 and 11.5 of Division 3 of the California Business and Professions Code.

8.9 Reporting and Monitoring

The responsible party, Alex Rashed, will perform a weekly inspection of the cultivation site to ensure the guidelines of security management are being carried out successfully, and the notes shall be logged in the Operations Manual, which is to be kept on site. Any poorly performing elements of the system or improper employee conduct will be corrected.



Section 9 Stormwater Management

9.1 Summary

Flying O Farm recognizes that the protection of surface waters is paramount to the operation of a commercial cannabis cultivation farm. The Flying O Farm property contains existing roads for the purpose of ingress and egress to the cultivation site. The storm water management plan will address some of the remaining smaller issues that may, under extreme precipitation events, result in distribution of sediment to waterways and to ensure that there is no risk of contamination via fertilizer or chemicals.

9.2 Protecting Downstream Water Bodies from Water Quality Degradation

Flying O Farm will manage storm water by continuing to maintain the road system, implement measures to prevent potential of contamination from fertilizers and chemicals, implement best management practices, and train personnel about best management practices and emergency waste discharge response. The project site is located 100 feet away from any watercourse and will have an appropriately sized vegetated buffer in place. There will also be straw wattles in place to help slow storm water flow and minimized erosion.

9.3 California State Water Board Compliance

The cultivation site will be in compliance with the California State Water Board, The Central Valley Regional Water Quality Control Board, and the North Coast Region Water Quality Control Board orders, regulations, and procedures as directed. Notice of Applicability will be available upon request.

9.4 Topsoil, Fertilizers, and Pesticide Risks

The project proposes to use predator pest to create an environment where pesticides, herbicides, and fungicides can be avoided. All fertilizers applied are biologically based and organic in nature. Liquid fertilizer, the kind that is most likely to contaminate waterways, will not be used on site. With regard to topsoil, the agricultural BMPs that insure it remains on site include, cover crops, 100% ground cover and mulches, and avoidance of mechanical compaction of the soil. If any such chemicals are to be present on the project, the chemicals will comply with section 4 of this report. Meaning chemicals will be stored in a secure location, 100 feet from any spring, top of bank, edge of lake, delineated wetland or vernal pool. All fertilizers applied are biologically based and organic in nature. Liquid fertilizer, the kind that is most likely to contaminate waterways, will not be used on site. With regard to top soil, the agricultural BMPs that insure it remains on site include, cover crops, 100% ground cover and mulches, and avoidance of mechanical compaction of the soil.

9.5 Illicit Discharge of Irrigation or Storm Water from the Premises

Flying O Farm recognizes that the greatest risk of storm water discharge and potential sediment delivery



to receiving waters is often from the gravel surfaced interior road system. Flying O Farm will ensure that drainage features on the existing roads are designed to avoid possible connection to receiving waters, and instead to discharge to vegetated buffer. If necessary, water bars and rolling dips will be installed at appropriate locations to slow the surface flow of storm water runoff and reduce flow to any culverts located on the road system. For activities related to the cultivation of cannabis, Flying O Farm intends to cultivate on areas of the property with gradual slope less than 30%. A year around groundcover of native and pasture grasses will be maintained over the entire site. Disturbance activities will not be conducted during the wet season, Oct 15 to April 15, and cover crops will be used in the canopy area during the winter. Composting areas will be covered during the winter period.

9.6 Public Roads

Any stormwater runoff will not result in an impact to downstream hydrologic structures nor the geomorphological features of waters of the state. This is due to the fact that, vegetated buffers will be in place, straw wattles and water bars will be in place, and discharge should not increase. Waterways will be monitored, maintained, and systematic implementation of BMPs will be provided. This will result in a negative impact on downstream hydrologic features, both natural and manmade.

9.7 Volume Discharge and Flood Elevation

There is no risk of increase in stream discharge from the property because soil infiltration capacity is not being decreased. The project does not propose any impermeable areas associated with the cultivation. If imperviable surfaces are to be added, the proper hydrology study will be performed, and volume capture designed as needed. The project does not propose any net fill within a flood zone. Since no net fill is proposed within a flood zone, the project does not anticipate increasing the flood elevations downstream.

9.8 Compliance with the Requirements of Chapter 29, Stormwater Management Ordinance of the Lake County Ordinance

Flying O Farm has reviewed the Lake County Storm Water Management Ordinance and finds the project to be in compliance with the ordinance. This project minimizes development, meets Regional Water Quality Control Board requirements, as has been enrolled in the general discharge waiver program through the California State Water Board. The project does not require an NPDES storm water management plan or SWPPP.

9.9 Proposed Grading

Any proposed grading at the cultivation site will be done after the early activation period. This location is more than 100 feet from surface waters and has a native vegetative buffer strip intact for over 100 feet surrounding the entire garden. Any project grading will utilize all available and required BMP's and commence only once all applicable permits have been acquired.



9.10 Stormwater (BMPs)

Flying O Farm will implement a storm water management plan to protect waterways and water bodies from runoff and erosion. The property uses the following design measures and operational tactics to minimize harmful run off from reaching any water ways or water bodies:

- Locate cultivation site more than 100 feet from any spring or top bank;
- Locate covered storage areas more than 100 feet from any spring or top bank;
- Limit clearing and grading of native vegetation at the site to the minimum area needed to build the project,
 allow access and provide fire protection;
- Minimize grading and soil disturbance during grow site development;
- Native grass seed will be applied outside of the cultivation area to disturbed areas before installation of mats/blankets and wattles;
- Storm water drainage structures should not discharge onto unstable slopes, earthen fills, or directly to a watercourse:
- Drainage structures should discharge onto stable areas with straw bales, slash, vegetation, and/or rock riprap;
- Remove excess soil and other debris and place used material in safe and dry environment;
- All necessary control structures should be in place and functioning, and all areas of exposed soil because of
 grading should be stabilized as soon as possible after grading is complete and before any precipitation
 event that could cause erosion and/or deliver storm water runoff to a water body; and
- Riparian zones will be avoided, and vegetation will be maintained to protect water courses from growing operations.

9.11 Construction Storm Water Management

Flying O Farm anticipates minor construction at the cultivation site to establish the proposed outdoor cultivation. All proposed grading and building will be covered under a separate permit. Flying O Farm will implement a Low Impact Development (LID) strategy when possible.

- Protect and establish vegetation to prevent dislodging and transporting of soil;
- Train and educate construction crews and personnel to better understand the effects of storm water pollution from construction projects and learn ways to prevent or minimize pollution on the job;
- Stabilize construction entrances and exits to prevent tracking onto roadways;
- Protect exposed slopes from erosion through preventative measures such as covering the slopes to avoid contact with storm water by hydroseeding, applying mulch and/or using plastic sheeting;
- Use brooms and shovels whenever possible to maintain a clean site instead of a hose;
- The project will designate a concrete washout area to avoid wash water from concrete tools or trucks from entering gutters, inlets or storm drains;



- Maintain washout area and dispose concrete waste on a regular basis;
- Establish a vehicle storage, maintenance and refueling area to minimize the spread of oil, gas and engine fluids;
- The use of oil pans under stationary vehicles will take place; and
- Protect drainage inlets from receiving polluted storm water using filters such as fabrics, gravel bags or straw wattles, and so doing check on a regular basis the weather forecast and be prepared for rain by having necessary materials onsite before the rainy season.

9.12 Reporting and Monitoring

The responsible party, Alex Rashed, will perform a weekly inspection of the cultivation site to ensure the guidelines of stormwater management are being carried out successfully, and the notes shall be logged in the Operations Manual, which is to be kept on site. Any poorly performing elements of the system or improper employee conduct will be corrected.



Section 10 Waste Management

10.1 Purpose

The Waste Management Plan provides guidelines to minimize the generation of waste and for the proper disposal of waste produced during the cultivation and processing of cannabis at Flying O Farm. The primary objective is to prevent the release of hazardous waste into the environment, minimize the generation of cannabis vegetative waste and dispose of cannabis vegetative waste properly, and manage growing medium and dispose of growing medium properly.

Flying O Farm's waste management plan includes measures to monitor and evaluate the performance of the plan, as well as ensure that all data and information is reported to Lake County and the proper local agencies.

10.2 Solid Waste Management

OVERVIEW

Flying O Farm's Solid Waste Management Plan focuses on the following; The reduction of solid waste in accordance with the County of Lake and the State of California's conservational goals, the operations of a sustainable solid waste management system to ensure the protection of the environment, streams, riverbeds, wetlands and all habitats surrounding the cultivation premises. Mitigating the amount of solid waste diverted to a landfill. Properly monitoring, evaluation of effectiveness of the plan, and reporting of data to Lake County and the appropriate local agencies. All employees are required to follow the procedures outlined in this plan.



ESTIMATED AMOUNT OF SOLID WASTE

We have identified the following items as sources of potential solid waste generated at our facility:

Туре	Amount	Amount	Refuse Facility
	(lbs/day)	(lbs/year)	
Paper & Cardboard	2	360	Compost on site
Glass	1	180	Lake County Waste Transfer Station, 230
			Soda Bay Road, Lakeport CA
Metal	2	360	Lake County Waste Transfer Station, 230
			Soda Bay Road, Lakeport CA
Plastics	1.5	270	Clearlake Landfill and Quakenbush Facilities
			in Clearlake, CA
Organic	10	1,800	Compost on site
Inert	0	0	Clearlake Landfill and Quakenbush Facilities
			in Clearlake, CA
Household hazardous Waste	0.5	90	Clearlake Landfill and Quakenbush Facilities
			in Clearlake, CA
Special Waste	0	0	Clearlake Landfill and Quakenbush Facilities
			in Clearlake, CA
Mixed Residues	0.5	90	Clearlake Landfill and Quakenbush Facilities
			in Clearlake, CA

SOLID WASTE REDUCTION PLAN

Flying O Farm intends to decrease waste by 15% over the first three years of operations and will continue to make efforts to reduce waste a priority. Total volumes are recorded and logged each month as benchmarks for next year's goals.



SOLID WASTE REDUCTION PLAN (BMPs)

Flying O Farm will achieve annual rate of waste diversion with a target goal of 50%. Assign and train staff on waste reduction and discuss waste and recycling strategies once per quarter and at the beginning of each phase of the cultivation process with subcontractors and vendors with the goal of reducing solid waste generation. Designate multiple spaces on the property to collect recyclable materials and sort materials into biodegradable, recyclable and non-recyclable receptacles Reuse and recycle materials to divert waste from landfill; and promote conscientious purchasing with the following:

- Consider lifespan of the purchase, utilize warranties and servicing options;
- Consider purchases with replaceable parts so they are easy to repair;
- Look for products that can easily be reused or recycled or are made from recycled materials;
- Check that the products do not contains toxic materials; and
- Consider products with minimal packaging.

Flying O Farm will purchase farm inputs and materials in bulk using reusable totes and containers and looks for companies that use reusable, compostable; or recyclable packaging while working with logistics vendors to maximize transportation and logistics efficiencies. Work with packaging vendors who share our waste reduction goals and offer recyclable materials; Design packaging with eco-friendly, reusable and/or recyclable materials, and budget financial resources to waste reduction. Evaluate waste reduction programs with professionals, annually, and modify as needed to achieve our goal. Manage, track and analyze information for actionable insights and cost savings.

SOLID WASTE COLLECTION

Flying O Farm will maintain separate trash enclosures and storage areas for organics, recyclable waste and non-recyclable waste in compliance with Lake County Ordinances. All compostable waste will be composted on site. All non-compostable solid waste will be hauled to a solid waste facility, obtaining record from solid waste facility showing the acceptance of all solid waste, address of facility, the date, the volume or weight. For onsite collection of waste, Flying O Farm will place portable waste bins designated for green waste, recyclables and non-recyclables in the most convenient and highly trafficked areas for easy disposal. Two to four times per month, designated employees will gather all non-compostable solid waste and haul to the appropriate refuse facility using a company truck. All solid waste will be secured under tarps in transit.



10.3 Hazard Analysis

OVERVIEW

Flying O Farm's Hazard analysis is designed to identify and evaluate hazards associate with cannabis cultivation. This includes analysis of cultivation, processing, storing and packaging as well as all other activities associated with the production of cannabis on site. The goal of the plan is to determine whether there are existing hazards which require preventative control. Hazards include biological, chemical or physical. The project does not intend to use or produce any hazardous waste on site.

The analysis includes the following: Biological hazards, including microbiological hazards; chemical hazards, including radiological hazards, pesticide(s) contamination, solvent or other residue, natural toxins, decomposition, unapproved additives, or food allergens. Physical hazards, such as stone, glass, metal fragments, hair, or insects. In the case the preventative controls are recommended, Flying O Farm will implement these measures before each cultivation season.

IDENTIFICATION OF POTENTIAL HAZARDS

Biological Hazards: Cultivation activities may require the use biologically active fertilizers. Application of these products will follow all rules for safe pesticide and fertilizer storage and application. All Flying O Farm employees will be trained in the safe handling of potential biological hazards.

Chemical Hazards: While Flying O Farm utilizes organic farming, and prioritizes the use of non-hazardous products and materials, there may be a potential for chemical hazards with the use of cleaning products, fuels, and various construction materials. Should Flying O Farm employees use these products, all will be trained in safe handling and application procedures. All potentially hazardous materials will be stored in a manner to minimize the risk of spillage and contamination, in a secure and clearly marked area.

Physical Hazards: An analysis of the cultivation site produced no evidence of physical hazards. To limit potential future risk, the site will be kept free of rubbish and debris, and employees will wear appropriate protective clothing while working on site.

Evaluation: The most effective strategy to reduce the potential for illness and injury from hazardous wastes is to reduce their use and presence onsite. In the case that hazardous material is stored and used, the following best management practices are followed to reduce risk:

All hazardous materials will be clearly labeled as hazardous and stored in a manner which reduces the risk of spillage and contamination. All employees will be trained in the safe handling and storage protocols for hazardous materials.



All employees will be briefed on the emergency response plan for possible spillage of, or exposure, to hazardous waste, and the location of emergency contacts and response procedures. All hazardous waste will be disposed of properly.

In regard to the end product and the cannabis consumer, Flying O Farm will evaluate the following:

- The sanitation conditions of the processing site;
- The operation's transportation and transfer practices;
- Processing procedures;
- Packaging and labelling activities;
- The storage of packaging and/or the finished cannabis;
- Any other relevant factors product

No additional ingredients or additives will be used in the processing or packaging process. Licensed distribution companies involved in the transport of Flying O Farm's products will be assessed for the safe and sanitary conditions of their company vehicles used for transport. Products, at the time of transfer and transport will be placed in compliant packaging, and completely sealed from the outside environment in airtight containers. The storage, processing, and packing facility will follow the guidelines set for the in the USDA's Sanitation Performance Standards Compliance Guide, in order to ensure the highest standards for employee and consumer safety.

MANAGEMENT OF HAZARDOUS WASTE

Currently there are no Resource and Recovery Act (RCRA) or Non-RCRA hazardous waste located on the premises. Clear plastic totes will be used for the storage of potentially hazardous waste and clearly labeled to display the volume and type of material stored. Containers will be stored in a locked storage area and will only be accessible to authorized staff.

The type of material, date, and time will be entered into a hazardous waste manifest located within the secure storage area and will be stored for five years. When returning material into storage, the type of material, volume used, name of employee, date and time will be entered into the manifest. Storage areas containing hazardous waste will be inspected weekly by Flying O Farm staff to ensure accurate record keeping and safe storage conditions.

EMERGENCY SPILL PROTOCOL

In the case of a spill, the employee shall: Perform an initial risk assessment from a safe distance, first considering the type of material spilled, volume of spill, potential for fire or airborne vapor; and then immediately make contact with Alex Rashed and give an initial risk assessment. In the risk of fire, call 911 or the Lower Lake Fire Department, and locate the nearest posted fire extinguisher. If no immediate fire risk is present, employee shall change into appropriate safety gear/equipment and clean up spill



immediately. After spill has been cleaned, place material in a secure storage bin to be taken to a hazardous waste recovery facility along with all clothing worn during clean up. If an immediate risk is perceived, all staff will evacuate the premises, contact the appropriate response authorities, and log as the nature of the spill for reporting to emergency response authorities.

EMPLOYEE TRAINING

All Flying O Farm's staff will be responsible for the safe handling, storage, and disposal of hazardous materials. An introductory training on company procedures will be conducted before any employees can begin working. Training will include:

- Procedures for the safe disposal of hazardous materials. Storage locations containing hazardous materials
 and the labeling system for materials. How to appropriately log and track the movement and use of
 hazardous materials onsite; and required safety gear and appropriate clothing to wear while handling
 hazardous materials;
- Use of hazard grade Personal Protection Equipment (PPE) according to the specific requirements of the
 hazardous material including rubber gloves, rubber boots, glasses or eye protectant, ear protectant, apron or
 skin protector, air filter face mask, chemical spill UL grade filter, proper wash and storage are of PPE
 materials;
- Chemical bins and storage will be separate from all other material and handled accordingly; and
- Emergency spill response procedure, the location of emergency response contact information, locations first aid stations and the location of fire extinguishers on the premises

RECORD KEEPING AND STORAGE

Flying O Farm does not intend to utilize or generate hazardous waste as part of the cannabis cultivation program. However, data will be logged into the hazardous waste manifest located in storage where hazardous materials are stored, in the case of use or incidental generation. The storage room shall be maintained with the materials safety data sheets (MSDS) appropriate to the contents of the room. All employees shall be trained for competency on how to read and understand these documents:

- Name of chemical;
- Manufacturer's information;
- Hazardous ingredients/identity information;
- Physical/chemical characteristics;
- Fire and explosion hazard data;
- Reactivity data;
- · Health hazard data; and
- Control measures: Duplicate copies of the MSDS shall be maintained in a separate location on-site, along with records of the locations of volatile or restricted substances.



10.4 Cannabis Vegetative Material Waste Management

Flying O Farm's Cannabis Vegetative Material Waste Management Plan (CVMWMP) provides compliant guidelines for on-site composting and removal of all cannabis waste, organics and green waste.

Flying O Farm's CVMWMP includes measures to monitor and evaluate the performance of the plan, as well as ensure that all data and information is reported to Lake County and the proper local and/or state agencies.

The recording and benchmarking of the amount of cannabis vegetative waste generated on site will be performed on an annual basis. The reduction of cannabis vegetative waste generation; and the processing, storage and disposal of cannabis vegetative waste will occur regularly during the cultivation season. All employees are required to follow the procedures outlined in this plan.

ESTIMATES FOR CANNABIS VEGETATIVE WASTE

We estimate that the project will be applying for (1) A-Type 3B permit will produce 1,050 lbs of cannabis vegetative waste which will consist of stems, branches, trunks, roots and other organic materials from the plant rendered useless in the harvesting process.

CANNABIS VEGETATIVE WASTE REDUCTION PLAN

Flying O Farm 's reduction plan hinges on healthy plants and the composting of all clean unusable cannabis vegetative waste on site.

PROCESSING, STORAGE AND DISPOSAL (BMPs)

All green waste is composted onsite and reused on site. All green waste is held in designated holding area for 72-hour period with affixed batch information and weight before beginning the composting process to render unusable, cannabis vegetative waste will be shredded and made unrecognizable and added to a ground mixture of at least 50% non-cannabis material, tracking each batch from disposal to compost through track and trace once the system is live at the State level.

Green waste that is unable to be composted for any reason will disposed of in a secure receptacle and brought to a solid waste facility, obtaining record from solid waste facility showing the acceptance of the green waste material, address of facility, the date, the volume or weight of cannabis accepted.

Detailed records of cannabis vegetative waste will be logged and benchmarked for the Clearlake Landfill and/or Quakenbush Facilities.



STORAGE

The facility will feature a secure cannabis waste area for cannabis plants that have been marked for disposal. At the close of each day, cannabis plant waste from the property will be removed and placed in the secured cannabis waste area and held for a minimum of 72 hours. The secure waste area will remain locked and only authorized personnel will have access. At the end of each week, all cannabis products that have been marked for disposal shall be rendered unusable by grinding and incorporating them with other ground organic materials (e.g., food, coffee grounds, shredded paper), yielding a mixture that is at minimum 51 % non-cannabis waste by volume. The mixture will then be transferred to the composting site. Once a month, on a regular basis, the compost will be turned to encourage proper rates of decomposition.

MONITORING AND DOCUMENTING

Flying O Farm is committed to monitoring and documenting the amount of cannabis vegetative waste that is generated by the facility on a monthly basis. These processes will include weighing and logging the total amount of organics and cannabis waste generated, Weighing and documenting the total amount of retail-ready cannabis flower products against cannabis vegetative waste generated.

Flying O Farm's Cannabis Vegetative Material Waste Management Plan has been developed in compliance with the appropriate local, county and state laws that pertain to the composting and recycling of organic and green waste produced by our cultivation process, including:

- Cannabis, Non DAA qualified, AB 2490; State Reduction Goals, AB 341 (organics out of landfills goal);
- State Reduction Goals, California 70-percent reduction plan;
- Cannabis Cultivation Policy, California State Water Resources Board; and
- California Code of Regulations, Title 3 Food and Agriculture, Division 8 Medical Cannabis Cultivation, Section 8108 Cannabis Waste Management.

10.5 Growing Medium Management

Projected 2024 Growing Medium: 1000 Yards.

Projected 2025 Growing Medium: 20 Yards.

Projected 2026 Growing Medium: 20 Yards.

Type of Growing Medium: Compost-based organic potting soil. Our soils are mixed with compost at a 2:1 ratio respectively and mixed into the native soil. We prefer to grow in planters as it reduces waste and the need to replenish soils annually. This technique drastically reduces our growing medium waste. Unless the soil is compromised, the soil will never be removed from the property or disposed of.



WASTE REDUCTION (BMPs)

Plant cover crop to boost soil fertility and protect from storm events Implement Integrated Pest Management practices to avoid the need for pest control, contamination and new grow medium No agrochemicals, Genetic Modified Organisms (GMO), or synthetic additives will be used during the cultivation of cannabis.

Flying O Farms also reduce growing medium waste through pest control, applying an integrated ecosystem-based strategy that focuses on long-term prevention of pests through a combination of techniques such including biological control habitat manipulation modification of cultural practice, uses of resistant varieties.

SOIL REMOVAL GUIDELINES

In the case that soil is compromised and needs to be removed from the property, the following guidelines are followed:

Excavated soil will be loaded directly onto trucks for off-hauling to the appropriate waste disposal facility. After the soil is loaded into the transport truck, the soil will be covered with secured tarps according to all applicable CA. Department of Transportation regulations to prevent soil from spilling during transport to the disposal facility. If excavated impacted soil is stockpiled on-site prior to off-hauling, it will be placed on a paved surface and covered with plastic tarp and held down by weights. Stockpiled soil, if any, will be covered with plastic sheeting, or other similar material, at the end of each workday. A stockpile that is not being actively worked on for more than 60 minutes will be covered with plastic sheeting to prevent dust from leaving the site.

REPORTING TO LAKE COUNTY

All testing result will be recorded in logs managed by the designated responsible party. Data collected during the cultivation of cannabis will be shared and reported to County of Lake, and the following agencies upon request: The CA. Department of Food and Agriculture; and the Department of Health.

10.6 Monitoring and Reporting

We will benchmark annual ratio of retail-ready flower products to solid waste generated. In monitoring Growing Medium waste, Flying O Farm will measure waste in tons. As referenced above, we reuse and recycle all growing medium that is brought onto our site. The only time the project will remove growing medium is if the soils are compromised. We will measure growing medium waste in tons when deposited at the appropriate refuse facilities.



The responsible party, Alex Rashed, will perform a weekly inspection of the cultivation site to ensure the guidelines of Waste Management are being carried out successfully, and the notes shall be logged in the Operations Manual, which is to be kept on site. Any poorly performing elements of the system or improper employee conduct will be corrected.

Section 11 Water Resources

11.1 Summary

Flying O Farm's Water Resources Management Plan (WRMP) has been designed to minimize adverse impacts on surface and groundwater resources and to ensure that on site water resources and management is in full compliance with applicable local, county and state regulations. The applicant will draw water from a proposed well on the project parcel. The well will be sealed from the outside environment and inlets will be screened to prevent macro invertebrates from entering the box.

From the proposed well, water will be delivered to a water tank collection system. When tanks are full a mechanical float switch stops the water diversion. Water is then pumped to 4 separate tanks, stored directly inside of the cultivation area. Water is delivered to irrigation system via a 1 hp jet pump pressure tank system. The project area is located below a large watershed that promotes ground water recharge.

11.2 Watershed Description

Flying O Farm is located in the Lower Sacramento River Watershed. The cultivation site is greater than 100 feet from any watercourses on the property.

11.3 Water Conservation (BMPs)

Flying O Farm will use best management practices from Central Valley Regional Water Quality Control Board BMP for Cannabis Cultivation. All employees and managers will practice the following:

- Do not obstruct, alter, dam or divert all or a portion of a natural watercourse without notification and approval from CDFW under the Lake and Streambed Alteration Program;
- Regularly inspect the entire water delivery system for leaks and repair leaky faucets and connectors;
- Use rainwater catchment systems to collect and store storm water during the rainy season in tanks, bladders, or engineered ponds to reduce the need for water diversions and/or pumping of groundwater during low flow periods (late summer to fall);
- Install float valves on all water storage systems to keep them from overflowing onto the ground;
- Hand water or use drip/trickle Irrigation systems, and limit watering;
- Use mulch to conserve soil moisture in cultivated areas, pots and bins;
- Water pump intakes should be screened to prevent the entrainment of threatened or endangered aquatic



- species consult Fish and Game Code sections 6020-6028; and
- Base layout and site development on a qualified expert's recommendations with respect to any listed species protected under California or federal law - avoid any action that constitutes a "taking" under the Federal Endangered Species Act or California Endangered Species Act, unless accompanied by an Incidental Take Statement or Incidental Take Permit issued by the appropriate agency.

11.4 Reporting and Monitoring

Based on the findings of the biannual monitoring inspections, Flying O Farm will assess the efficacy of the WRMP. If monitoring shows that measures implemented have proven effective, we will report the findings continue to inspect the site biannually. If the measures implemented on site have proven ineffective, we will submit a remediation plan to the CVRWQCB as well as a timeline for work to be accomplished. All data collected by site inspection will be shared with all concerned Lake County agencies. Flying O Farm will conduct biannual monitoring inspections of the cultivation site, all associated facilities, all roadways associated with cannabis cultivation, and any water bodies potentially impacted by cultivation related activities. The first monitoring will occur annually by November 1st of each calendar, and will ensure the following criteria are met:

- All stockpiles, soil amendments, pesticides, and fertilizers have been properly stored and/or protected;
- Erosion and sediment controls have been properly installed and are functioning, and all areas of exposed soil have been stabilized in preparation for the winter wet weather period;
- Drainage structures (water bars/rolling dips) have been installed and are functioning on all access roads, and all access roads intended for use during the winter wet weather period have been weatherproofed;
- All trash/refuse has been cleaned up where it cannot pass into or be transported into any water body and empty/used containers have been properly disposed of per manufacturer's instructions; and
- All water containment/storage ponds/dams have been inspected and appear to be in good, and stable condition;

The second monitoring inspection will occur annually after April 1st and before June 15th of each calendar year, and will ensure the following criteria are met:

- All stockpiles, soil amendments, pesticides, and fertilizers have remained properly stored and/or contained;
- Erosion/sediment controls implemented on bare soils have remained effective in preventing discharge of earthen materials and sediments off site;
- All access roads appear in good condition and erosion/sediment control has been effective in preventing discharge of earthen materials and sediment off- site; and
- All permitted water containment structure/ponds/dams have remained effective and in good condition;

11.5 Compliance

We are enrolled in Tier 2 of The Central Valley Regional Water Quality Control Board program. The project will comply with the State Water Resource Control Board Cannabis Cultivation General Order (Order No. WQ 2019-0001-DWQ). A copy of the Central Valley Regional Water Quality Control Board BMP for Cannabis Cultivation will be kept on site at all times.



Section 12 Water Use

12.1 Summary

Flying O Farm is currently in the process of drilling a well for their water supply. Once the well is established, an updated description of the well will be provided. A hydrology report has been submitted showing the capability of the proposed well to be an adequate water supply for all cultivation activities (See Hydrology Report submitted to County of Lake).

Water is delivered to an irrigation system via a 1 hp jet pump pressure tank system. Flying O Farm shall use a drip irrigation system to water plants. Our projected monthly water usage is 100,000 gallons for cultivation. In addition to cultivation we shall use 150 gallons for bathrooms and handwashing and an additional 100 gallons dust mitigation.

Applicant will not engage in any unlawful drawing of surface water. Applicant will not use water provided by a public water supply, unlawful water diversions, bottled water, a water vending machine or a retail water facility. The subject property is outside any County Water District "Exclusion Areas." The project will use water transportation trucks if needed or in an extreme emergency.

12.2 Water Storage (BMPs)

Flying O Farm will install vertical storage tanks according to manufacturer's specifications and place the tanks on properly compacted soil that is free of rocks and sharp objects and capable of bearing the weight of the tank and its maximum contents with minimal settlement. Water will be stored in polyethylene water tanks with a total of (8) 2,500 gallons of water stored at the cultivation facility.

New storage tanks will be located in areas with great slope stability and at the cultivation site. To prevent rupture or overflow and runoff, Flying O Farm will only use water storage tanks and bladders equipped with a float valve, or equivalent device, to shut off diversion when storage systems are full. All vents and other openings on water storage tanks will be designed to prevent the entry and/or entrapment of wildlife. We will also monitor the meter on a regular basis to ensure excess water is not being used.

12.3 Irrigation System

Daily watering of cannabis will be achieved by hand watering or via a drip irrigation system powered by a 1 hp jet pump and pressure tank system. In the event that drip and trickle line irrigation is utilized the watering will be administered by a timed irrigation controller, set to irrigate during the nighttime when the evaporation rates will be the lowest. Drip lines will be sized to irrigate large areas slowly, to maximize absorption, and will be placed under a layer of straw mulch. Hose bibs will be stationed throughout the cultivation area for spot watering.



IRRIGATION & SPRINKLERS (BMPs)

The irrigation best management practices implemented by Flying O Farm are as follows, but not limited to:

- The site will utilize a drip irrigation system with a schedule that requires use of as little water as possible;
- Regularly inspect our entire water delivery system for leaks and immediately repair any leaky faucets, pipes, connectors, or other leaks;
- Replace worn, outdated, or inefficient irrigation system components and equipment to ensure a properly functioning, leak-free irrigation system at all times;
- Install according to the irrigation design specifications, locally applied codes and standards, and manufacturers' product requirements;
- Actively manage the system and adherence to all applicable watering limitations;
- Ensure sprinkler heads and nozzles will apply water uniformly to the target area;
- Match the precipitation/application rate of the sprinklers for each zone (+/- 5 percent);
- Designed to reduce overspray of impervious surfaces or adjacent planting areas and prevent runoff of water.

12.4 Monitoring of Water

Flying O Farm will maintain records of diversion with separate records that document the amount of water used for cannabis cultivation separated out from the amount of water used for other irrigation purposes and other beneficial uses of water (e.g., domestic, fire protection, etc.). These records will be available upon request from the Water Boards or any other authorized representatives of the state. Flying O Farm will share data relating to the cost of implementing the water management plan with the County as requested.

12.5 California Drought Declarations

Flying O Farm recognizes that on occasion, the Governor of California and the Lake County Board of Supervisors has and likely will continue to periodically issue a proclamation of a local or state emergency based on drought conditions on any given year. In the event of such a Declaration, Flying O Farm will abide by all emergency regulations adopted in response to drought conditions.

12.6 Emergency Use Plan

In the case of an emergency that a retail water is needed, Flying O Farm will work with a licensed retail water supplier as defined by Section 13575 of the Water Code and provide the following information to



the Department in 7 days:

- A description of the emergency.
- Identification of the retail water supplier including license number.
- Volume of water provided and delivered.
- Actions taken to prevent the emergency in the future.

12.7 Water Availability Analysis

The Water Use Plan has been developed in compliance with the appropriate local, county, and state laws that pertain to the Water Use. These include:

- Cannabis Cultivation Policy & California State Water Resources Board;
- California Code of Regulations, Title 3 Food and Agriculture, Division 8 Medical Cannabis Cultivation, Section 8107;
- County of Lake Ordinance 3803;
- Division of Water Rights, Principles and Guidelines for Cannabis Cultivation.

Water Usage Calculation

Description	Use	Amount of Water Needed
Well Production	15 GPM (Anticipated)	
Existing Usage		
Proposed Usage	43,560 square feet of outdoor cannabis canopy	400,000 gal per season
	Difference	400,000 Gallons

12.8 Review

The designated responsible party, Alex Rashed, will review the water use on an annual basis and will share data relating to the cost of implementing this plan with the County as requested. The well will be monitored during recharge or storage tanks and Flying O Farm will meter and measure the amount of water pumped over cultivation season.



Appendix A: Fertilizer Information



WHEN USED AS DIRECTED

DR. EARTH

7-3-1

Pure & Natural

PREMIUM

BAT GUANO

TruBiotic Inside

Branficial and marent

NATURE'S INTELLIGENCE

ORGANIZATION.

An Immediate Source of Nitrogen - Stimulates Growth of All Types of Plant

NET WT. 1.5 LBS (4680 KG)







👚 Home > Soil Amendments > Fertilizers and Manures > Stutzman's Sup'r Green Chicken Manure 3-2-2 (Organic)



DIRECTIONS FOR USE Vegetable Gardens 1 bag per 200sq. ft. Work in, then apply layer over rows after seeding. New Lawns 1 bag per 200 sq. ft. Work in, then apply a fine layer as mulch after seeding prior to rolling. Keep moist.

1 bag per 200 sq. ft.

Flower Beds
Work in 1 bag per 200 sq. ft.

Established Shrubs, Trees, Roses, etc. Apply a generous layer from trunk to outer edge of foliage.

Double the abov

PRO	DUCT	SPECS	
UPC	Bag Wt	. Pallet Wt.	
25993-00001	25#	2000	
Bags/Palle	et	High & Tigh	
80		16 x 5	



Please visit our website at www.stutzman-environmental.com for information about our other organic fertilizer products or our line of premium pet care products.

888-877-7665

tutsman FARM5 CHICKEN MANURE

.00% Natural Organic Fertilize

A ground, 100% natural organic composted mixture of sawdust and chicken manure for superior mulching, feeding and water retention.



A HIGH PERFORMANCE, ENVIRONMENTALLY FRIENDLY, SLOW NITROGEN RELEASE PLANT FOOD





MORE RE

Until SUP'R manure had be used by t chicken mar plants. Raw soil too rapid 100% pure

SUP'R GRE Broilers are results in a h The element compost pro vegetable ga One annual improves lo

Here at D. S great pride it a consistentl honestly say result for les

beneficial m







Stutzman's Sup'r Green Chicken Manure 3-







\$4.40

1

Add to cart

SKU: GCM

Categories: Composts, Fertilizers and Manures, Soil Amendments, Soil Mixing

Description

~

Additional information

Reviews (1)

Description

- Guaranteed Analysis 3-2-2
- Over 5 times more plant food value than steer manure
- Guaranteed weed and dirt free
- Dry, composted, will not burn
- Excellent for retaining moisture
- Ground for uniform texture
- · Special slow release makes it last and last
- Really makes your vegetables, flowers and lawn grow
- Compliant with the USDA National Organic Program
- WSDA and CDFA certificates are available upon request from manufacturer.









PowerCrow

HIDAOPONICS - ORGANICS - AQUAPONIE

15.5-0-0

CALCIUM NITRATE

Pant Nutrients derived from: Calcium Nitrate (Hydratel Innomium Calcium Nitrate Double Salt

CAUTION: Keep out of reach of Children

Way be harmful if awallowed. Avoid contact with eyes. Strot store with combustible materials or nitrogenous telepp. In time of tes, fixed with water. Sweep up spilled material. Cline out bage. Store in a cool dry place.

WWW.PowerGrowSystems.com

Starting Gardens
BLACK
KOW



COMPOSTED COW MANURE

0.5-0.5-0.5 NET 5 LBS.

BOX 190 - OXFORD, FL 34484-0190 - (382) 783





Feather Meal Fertilizer 12-0-0

\$14.99



2 Pounds - Free 2-Day Delivery

Add to Cart



Ask us a question



Plants mostly rely on fertilizer containing all the necessary micronutrients for successful development and maturity.

One fertilizer that has grown in popularity primarily due to its numerous benefits to plants is Feather Meal 12-0-0.



Impact on the Environment

Feather Meal 12-0-0 is a composition of micronutrients geared towards healthy plant growth, guaranteeing a bumper harvest at the end of the season.



The fertilizer is produced by manufacturers that are mindful to the environment as the product is eco-friendly. The fertilizer is also free of the heavy metals that can wash down and pollute natural water resources or contaminate plants consumed by animals or humans.

Heavy metals - including lead, mercury, and iron - when consumed in large quantities, affect the general health of individuals or animals.

But you won't have this worry when applying Feather Meal 12-0-0 to your home garden.







Fish Bone Meal Fertilizer 4-17-0

\$ 29.99



5 Pounds - Free 2-Day Delivery





Ask us a question



Fish Bone meal 4-17-0 is exactly what you need for the best fertilizer that will give you high yields. This fertilizer is a marine-based alternative for those shying away from the traditional steamed bone meal. The best part is that you can use Fish Bone Meal on all kind of plants, including trees, shrubs and flowering plants.



The fertilizer is an excellent source of calcium and phosphorus and contains some amounts of nitrogen, which makes it ideal for perennials, garden beds, and bulbs.



This fertilizer is the best to use in places where a high volume of phosphorus is needed. You will notice the difference in blooming as compared to other forms of bone fertilizers. This product delivers tangible benefits to your plants. Its benefits include:

It is Organic

The best way to preserve soil and ensure you are not contaminating it in any form is by using organic fertilizer. This is what you get from Fish Bone Meal 4-17-0. This organic fertilizer contains zero additives, and you can, therefore, trust that your plants will only get the crucial natural ingredients to help them blossom. Also, it minimizes the risk of leaching or accumulation of toxic waste.

PRODUCTS & SERVICES ~ ENVIRONMENT ~ ABOUT US ~ MEDIA ~ CONTACT US



← FERTILIZERS

feeding as an effective and important tool in crop fertility - is going to be common only in our generation. The first chemical revolution in agriculture started over 100 years ago, when soil fertilization was discovered; the second chemical revolution - the idea of foliar

Leaf feeding or foliar fertilization with Grow More Fertilizers can increase yields of a healthy crop beyond the capabilities of conventional, soil applied fertilizers

Used correctly Grow More Water Soluble Fertilizers can provide an attractive economic return on investment over and above that obtained from soil applied fertilizers.

- Foliar Spray Grade Made With Low Biuret Urea

- Multi Nitrogen Sources

Grow More - 100% water soluble fertilizer concentrate for foliar or soil applications.











SUPERthrive® Vitamin Solution, 1 Gallon

Write a Review







Appendix B: Lighting Information



P: (707) 293-4224 E: kg@northbaycannaconsultants.com

Appendix C: Security Camera Information

















LX1080-166BW NEW PRODUCT



Reg.\$1,149.99

\$699.99

SAVE \$450.00 (39%)

QTY

1

Add To Cart

IN STOCK

Available Options

4 CAMERAS \$293.99 16 CAMERAS \$699.99

Select a Warranty

















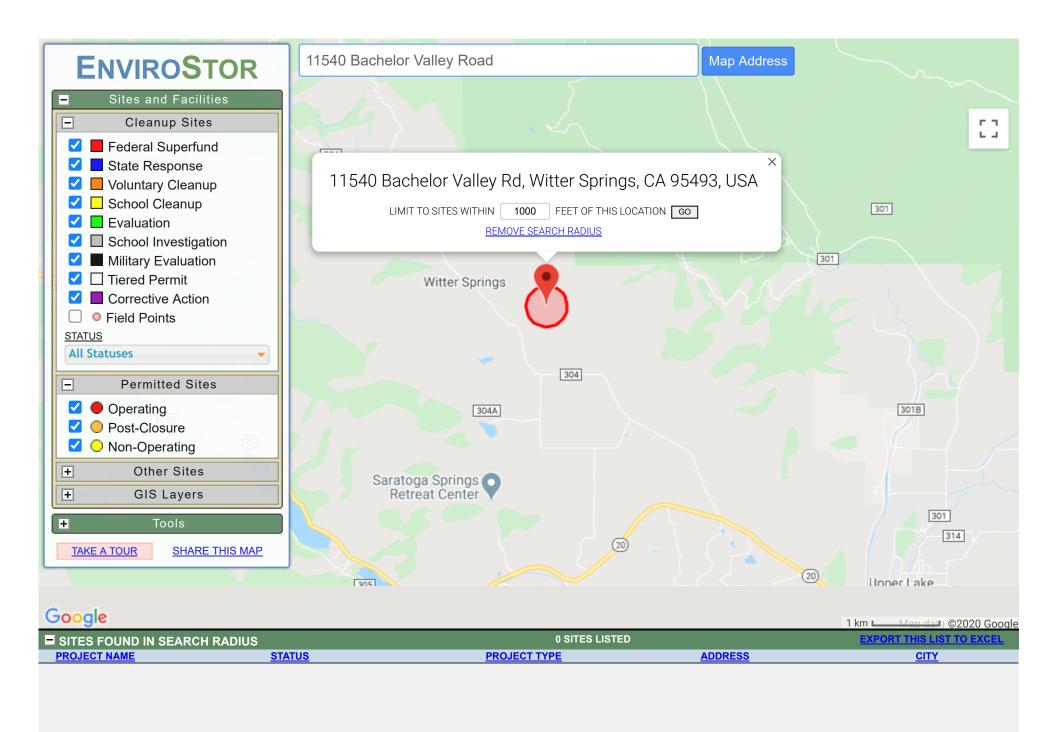
Appendix D: Additional Documents



707.987.0917 19280 Deer Hill Hidden Valley Lake CA., 95467

"Your one stop water shop 24 hours" Iron and Chlorine Removal Softeners • Filters • Pumps • Tanks

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Address	Bronetices LLY K	L city_	4-11-22
state CAUI	Zip	-	pate 4, 2.22
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Manganese ppm	/	PH 19	(id)
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After Pumpi	ng 2 HRS. 55.	4 HRS.60	24 HRS . 26.
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FLYING O RANCH

COMMERCIAL CANNABIS SITE PLAN

11540 BACHELOR VALLEY ROAD WITTER SPRINGS, CA 95493 APN: 002-024-22

Project Information

OWNER: RALPH GAMBONINI

11540 BACHELOR VALLEY ROAD

WITTER SPRINGS, CA 95493

LEASER/DEVELOPER: ALEXANDER RASHED

214 EDITH STREET PETALUMA, CA 94952 (707) 774-1234 REALPCS@COMCAST.NET

KYLE GEITNER, PRINCIPAL **CONSULTANT:**

CONSULTANT

WINDSOR RIVER ROAD WINDSOR, CA 95492

(707) 293-4224

11540 BACHELOR VALLEY ROAD PROJECT ADDRESS:

WITTER SPRINGS, CA 95493

PARCEL AREA: 238.11 ACRES

Purpose

THE PURPOSE OF THIS PLAN SET IS TO PROVIDE SUPPORT IN OBTAINING A COMMERCIAL CANNABIS USE PERMIT FOR 1 ACRE OF OUTDOOR CANNABIS CULTIVATION IN THE COUNTY OF LAKE.

Sheet Index

COVER SHEET

SURROUNDING AREA AERIAL

3.0 **EXISTING CONDITIONS** 4.0 PROPOSED CONDITIONS

5.0 **CANNABIS CULTIVATION SITE** CANNABIS RELATED BUILDING LAYOUTS 6.0

SECURITY PLAN

Flood Hazard Zone Information

FIRM DESIGNATED FLOOD ZONE:

BASE FLOOD ELEVATION:

CULTIVATION AREA ELEVATION: 1,400 FEET

FLOOD PROOFING REQUIRED?

NO

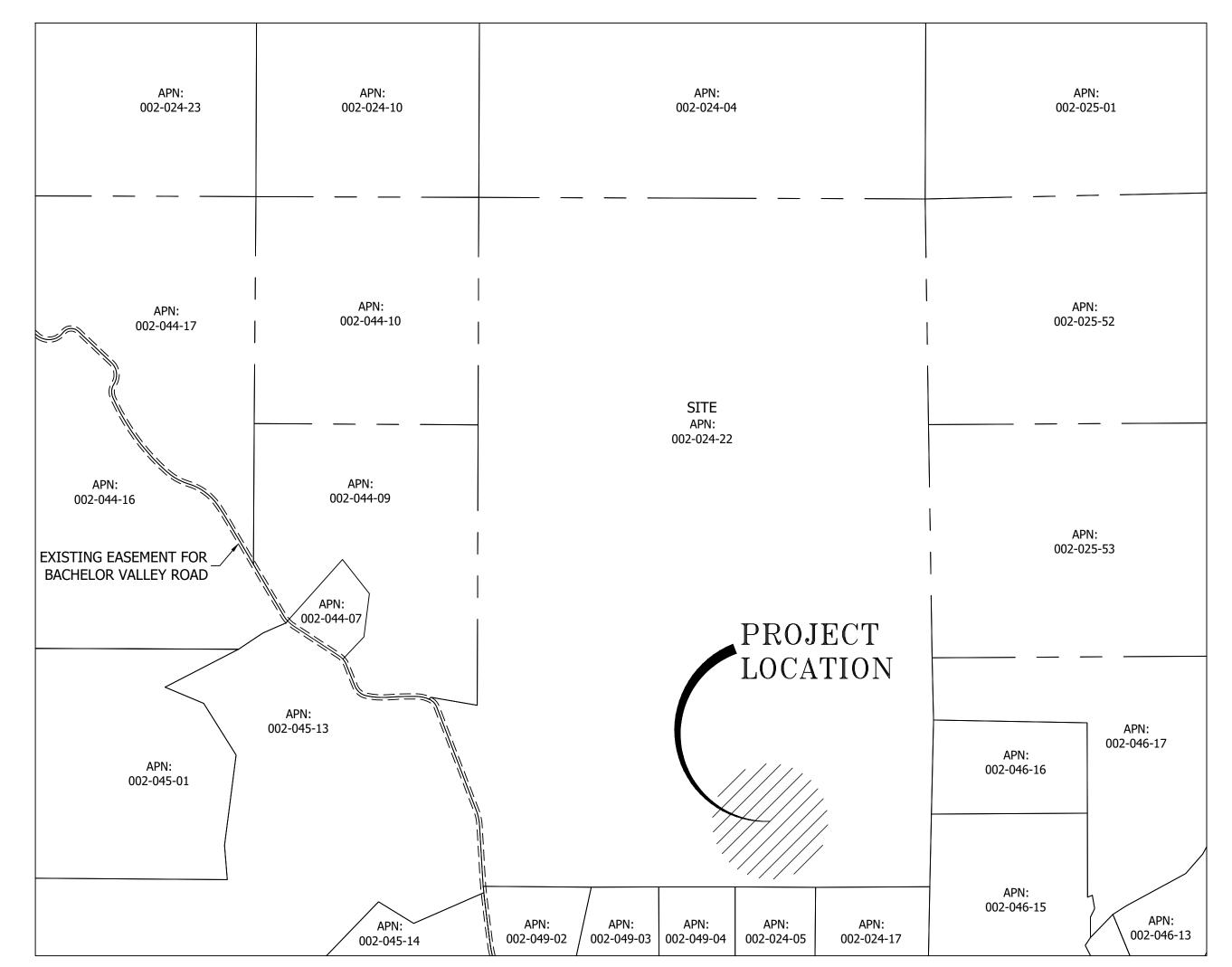
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Linetype Legend

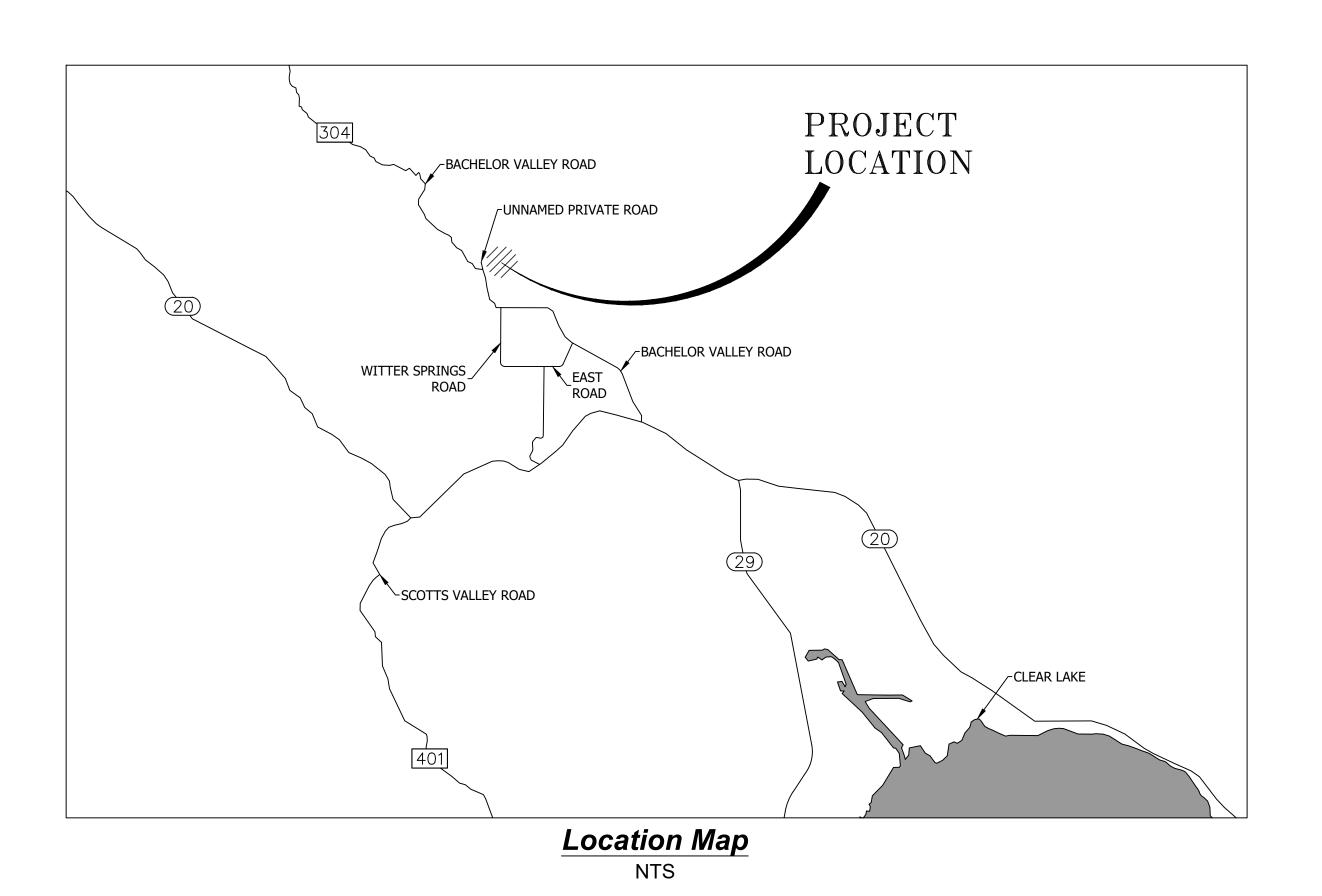
EXISTING	PROPOSED
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DEFINITION FENCE DRAINAGE PIPE PROPERTY LINE WATERCOURSE ELECTRICAL UTILITY LINE WATER LINE SANITARY SEWER FIBER ROLL TREE TO BE REMOVED

Appreviations			
AC	ASPHALT CONCRETE	FL	FLOW LINE
APN	ASSESSOR'S PARCEL NUMBER	GH	GREENHOUSE
APPROX	APPROXIMATE	HH	HOOPHOUSE
CL	CENTERLINE	INV	INVERT
CONC	CONCRETE	LF	LINEAR FEET
CY	CUBIC YARD	MAX	MAXIMUM
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM
DIA	DIAMETER	NA	NOT APPLICABLE
EG	EXISTING GROUND	NTS	NOT TO SCALE
ELEV	ELEVATION	PL	PROPERTY LINE
EP	EDGE OF PAVEMENT	S	SLOPE
EX	EXISTING		



Parcel Exhibit



NOTES:

PROJECT ADDRESS: 11540 BACHELOR VALLEY ROAD, WITTER SPRINGS, CA 95493 CLIENT:

ALEXANDER RASHED

CONSULTANT: KYLE GEITNER, PRINCIPAL CONSULTANT

DRAWN: 4/15/2024 ANR JOB #: SCALE: AS SHOWN REVISION: CHECKED: KJG

SHEET TITLE: **COVER SHEET** 1 OF 7

BAY CIVIL CONSULTING

NOTES:

I. PROPERTY LINES, EASEMENTS, AND TOPOGRAPHIC INFORMATION IS APPROXIMATE AND WAS OBTAINED FROM PUBLICLY AVAILABLE

- INFORMATION.

 2. THERE IS NO PUBLIC OR PRIVATE SCHOOL, GRADES 1 THROUGH 12, DEVELOPED PARK CONTAINING PLAYGROUND EQUIPMENT, DRUG OR ALCOHOL REHABILITATION FACILITY, LICENSED CHILD CARE FACILITY OR NURSERY SCHOOL, OR CHURCH OR YOUTH-ORIENTED FACILITY CATERING TO OR PROVIDING SERVICES PRIMARILY INTENDED FOR MINORS WITHIN 1,250 FEET OF THE PROPERTY.

 3. LOCATION MAP IS LOCATED ON SHEET
- 1.0.
 FOR PARCEL BOUNDARIES AND
 ADJACENT PARCEL BOUNDARIES, SEE
- 5. WATERCOURSE LINE TYPE THICKNESS
 TO DELINEATE THE TOP OF BANK.
 6. BASED ON PUBLICLY AVAILABLE DATA
 THERE ARE NO FAULT ZONES ON THE
 SUBJECT PROPERTY.

PROJECT ADDRESS:
11540 BACHELOR VALLEY ROAD,

WITTER SPRINGS, CA 95493

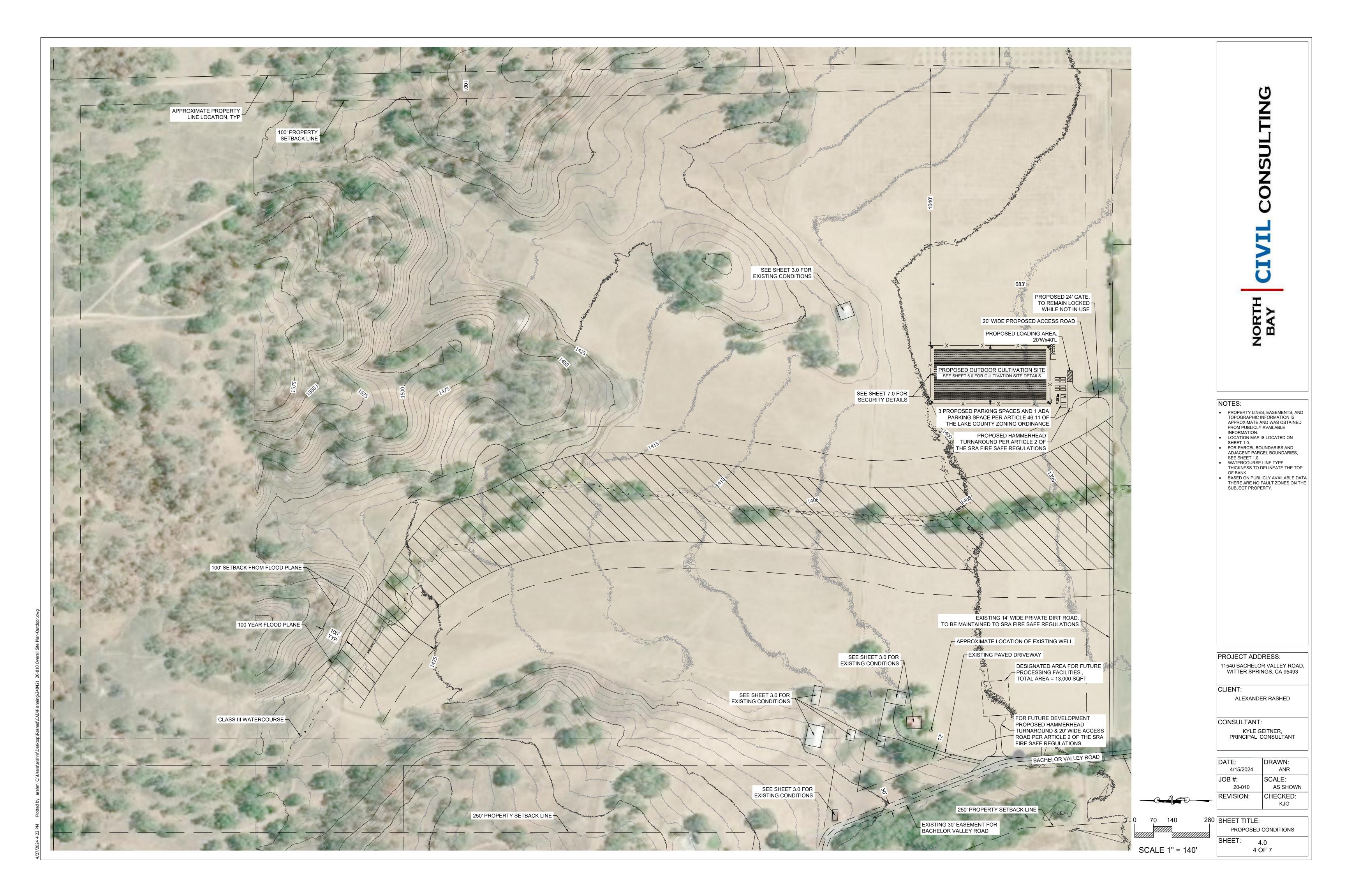
CLIENT:
ALEXANDER RASHED

CONSULTANT:

KYLE GEITNER, PRINCIPAL CONSULTANT

DATE: 4/15/2024	DRAWN: ANR
JOB #:	SCALE:
20-010	AS SHOWN
REVISION:	CHECKED:
	KJG

SHEET TITLE:
SURROUNDING AREA AERIAL
SHEET: 2.0
2 OF 7





PROPERTY LINES, EASEMENTS, AND TOPOGRAPHIC INFORMATION IS APPROXIMATE AND WAS OBTAINED FROM PUBLICLY AVAILABLE INFORMATION.

LOCATION MAP IS LOCATED ON

- FOR PARCEL BOUNDARIES AND ADJACENT PARCEL BOUNDARIES,
- SEE SHEET 1.0. WATERCOURSE LINE TYPE
- THICKNESS TO DELINEATE THE TOP OF BANK.
- OF BAIN.

 BASED ON PUBLICLY AVAILABLE DATA
 THERE ARE NO FAULT ZONES ON THE
 SUBJECT PROPERTY.

 STRAW WATTLES WILL BE PLACED
 AROUND CULTIVATION SITES TO
 PREVENT STORMWATER RUNOFF.
- THE ENTIRE CULTIVATION SITE WILL BE SEEDED TO STABILIZE THE SOIL.

PROJECT ADDRESS: 11540 BACHELOR VALLEY ROAD, WITTER SPRINGS, CA 95493

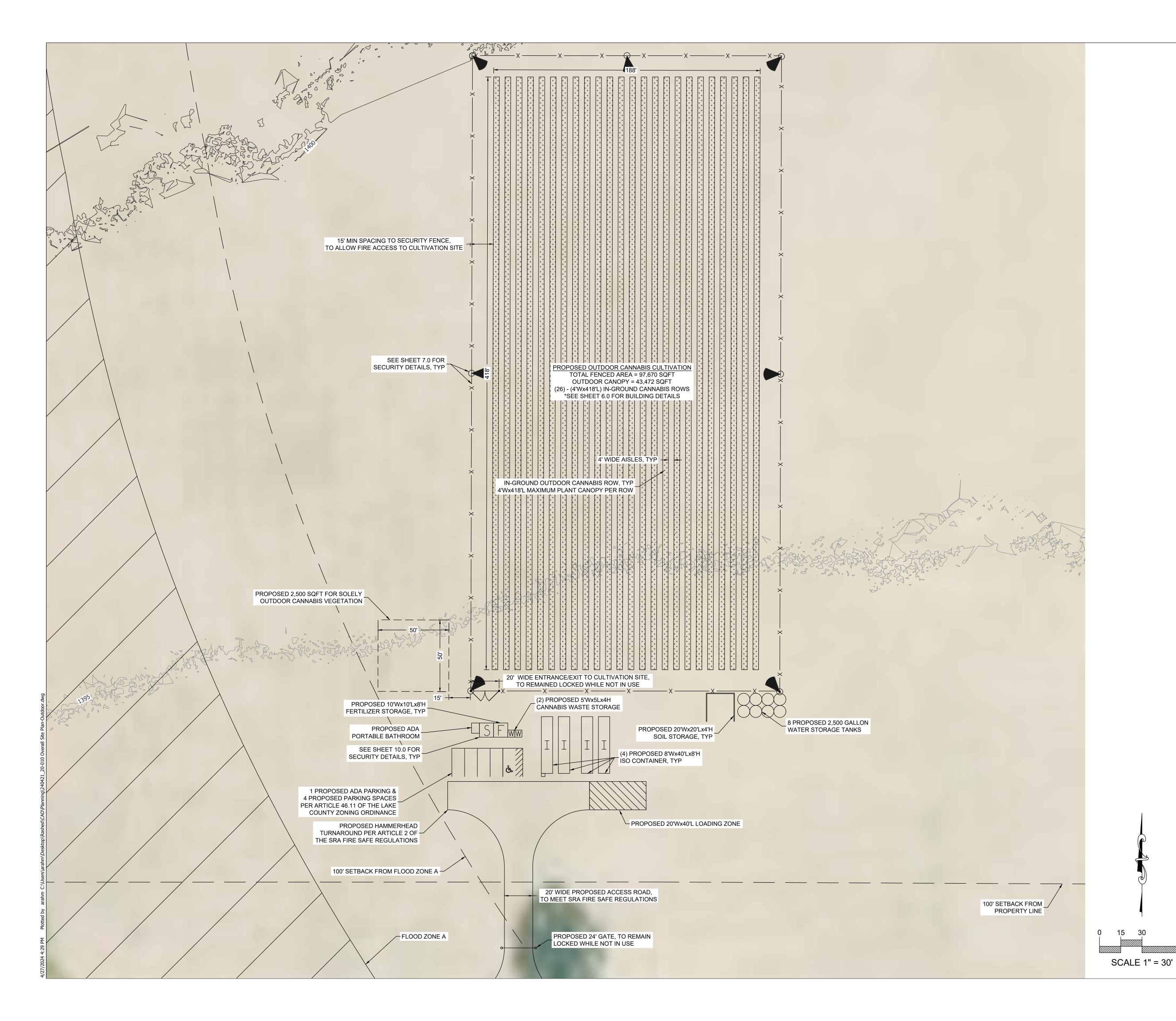
CLIENT:

ALEXANDER RASHED

CONSULTANT: KYLE GEITNER, PRINCIPAL CONSULTANT

DATE:	DRAWN:	
4/15/2024	ANR	
JOB #:	SCALE:	
20-010	AS SHOWN	
REVISION:	CHECKED:	
	KJG	

SHEET TITLE: **CULTIVATION SITE** 5.0 5 OF 7





PROPERTY LINES, EASEMENTS, AND TOPOGRAPHIC INFORMATION IS APPROXIMATE AND WAS OBTAINED

- FROM PUBLICLY AVAILABLE
 INFORMATION.
 LOCATION MAP IS LOCATED ON SHEET 1.0.
- FOR PARCEL BOUNDARIES AND ADJACENT PARCEL BOUNDARIES, SEE SHEET 1.0. WATERCOURSE LINE TYPE

- WATERCOURSE LINE TYPE
 THICKNESS TO DELINEATE THE TOP
 OF BANK.
 BASED ON PUBLICLY AVAILABLE DATA
 THERE ARE NO FAULT ZONES ON THE
 SUBJECT PROPERTY.
 STRAW WATTLES WILL BE PLACED
 AROUND CULTIVATION SITES TO
 PREVENT STORMWATER RUNOFF.
 THE ENTIRE CULTIVATION SITE WILL
 BE SEEDED TO STABILIZE THE SOIL.
 FOR MORE INFORMATION ON
 EXISTING PERMITTED BUILDING SEE
 PROPERTY MANAGEMENT PLAN.

PROJECT ADDRESS: 11540 BACHELOR VALLEY ROAD, WITTER SPRINGS, CA 95493

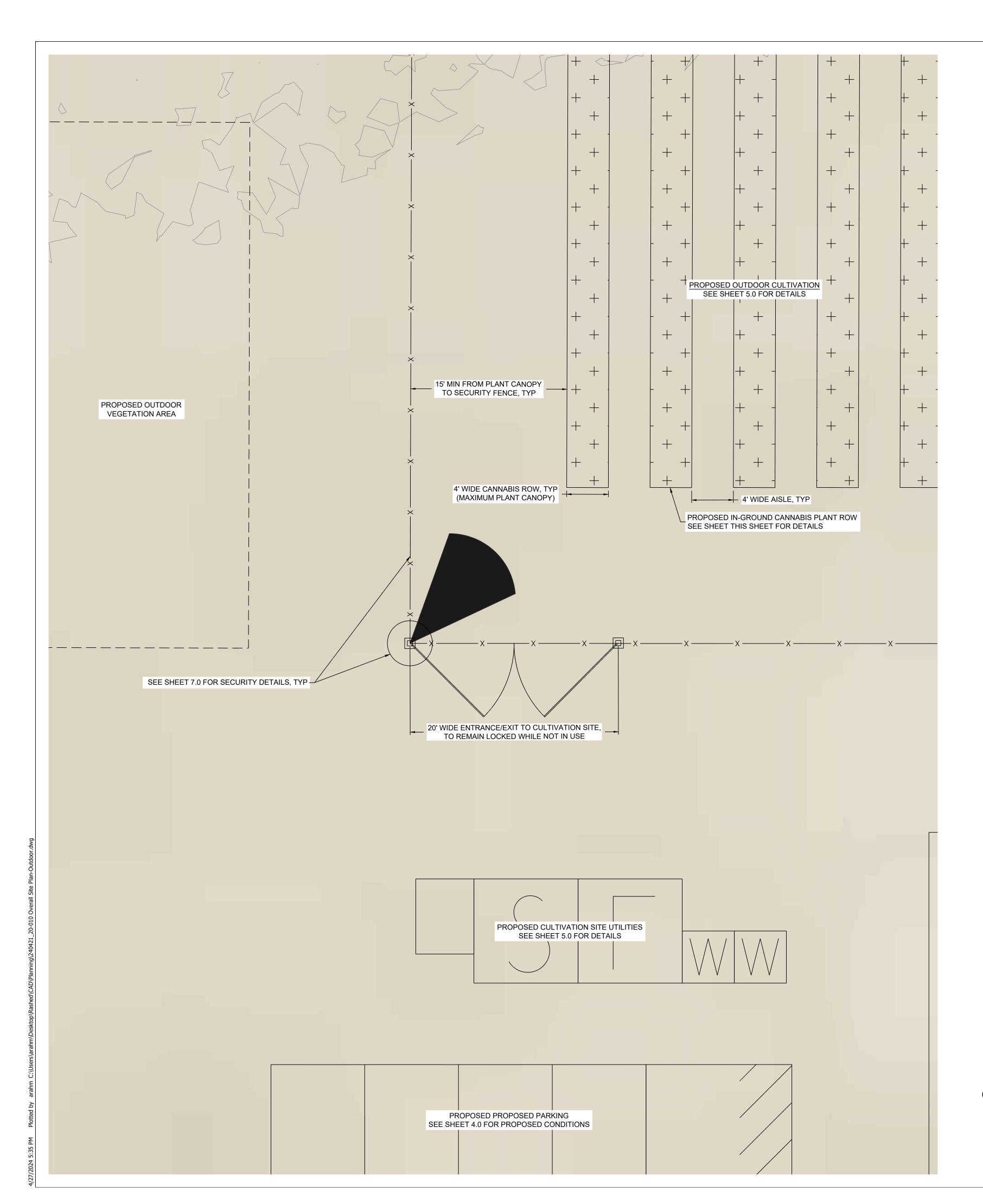
CLIENT: ALEXANDER RASHED

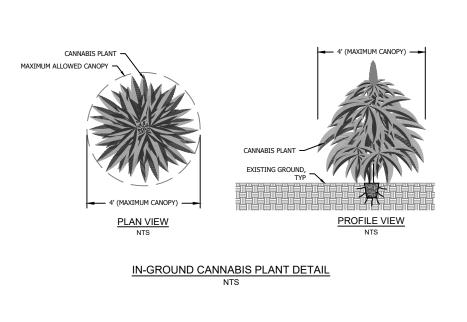
CONSULTANT:

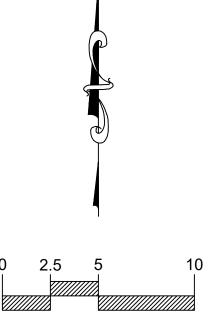
KYLE GEITNER, PRINCIPAL CONSULTANT

DATE:	DRAWN:
4/15/2024	ANR
JOB #:	SCALE:
20-010	AS SHOWN
REVISION:	CHECKED: KJG

SHEET TITLE:
CANNABIS RELATED
BUILDING LAYOUT 6.0 6 OF 7







SCALE 1" = 5'

- PROPERTY LINES, EASEMENTS, AND TOPOGRAPHIC INFORMATION IS APPROXIMATE AND WAS OBTAINED FROM PUBLICLY AVAILABLE
 INFORMATION.
 LOCATION MAP IS LOCATED ON
- FOR PARCEL BOUNDARIES AND ADJACENT PARCEL BOUNDARIES, SEE SHEET 1.0. WATERCOURSE LINE TYPE

- THICKNESS TO DELINEATE THE TOP OF BANK.

 BASED ON PUBLICLY AVAILABLE DATA THERE ARE NO FAULT ZONES ON THE SUBJECT PROPERTY.

 LIGHTS WILL BE PLACED AT ALL ENTRY POINTS TO THE CULTIVATION SITE AND ALSO AT THE ENTRY GATE OF THE PROPERTY.

 THE SECURITY CAMERAS ARE TO BE WEATHERPROOF CAMERAS FEATURING 1080P. THE SECURITY CAMERA WILL BE INSTALLED TO CAPTURE EVERY PART OF THE CULTIVATION SITE.

 SECURITY FENCE TO BE NON-TRANSLUCENT TO OBSTRUCT OUTSIDE VIEW OF THE CULTIVATION AREA.

PROJECT ADDRESS:

11540 BACHELOR VALLEY ROAD, WITTER SPRINGS, CA 95493

CLIENT:

ALEXANDER RASHED

CONSULTANT:

KYLE GEITNER, PRINCIPAL CONSULTANT

DATE: 4/15/2024	DRAWN: ANR
JOB #:	SCALE:
20-010	AS SHOWN
REVISION:	CHECKED:
	KJG

SHEET TITLE:		
SECURITY PLAN		
SHEET:	7.0	
	7 OF 7	



NRCS

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lake County, California



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



MAP LEGEND

Special Line Features Streams and Canals Very Stony Spot Stony Spot Spoil Area Wet Spot Other Rails Nater Features **Transportation** W Ŧ Soil Map Unit Polygons Area of Interest (AOI) Soil Map Unit Points Soil Map Unit Lines Special Point Features **Borrow Pit** Clay Spot Area of Interest (AOI) Blowout 9 Soils

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)

Interstate Highways

Closed Depression

Major Roads Local Roads

Gravelly Spot

Gravel Pit

US Routes

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

Aerial Photography

Marsh or swamp

Lava Flow

Landfill

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot Sandy Spot

3ackground

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lake County, California Survey Area Data: Version 18, Sep 6, 2021 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Severely Eroded Spot

Slide or Slip

Sinkhole

Sodic Spot

Date(s) aerial images were photographed: May 8, 2019—May 10, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
214	Sleeper variant-Sleeper loams, 15 to 30 percent slopes	7.0	15.1%
233	Still loam, stratified substratum	39.5	84.9%
Totals for Area of Interest		46.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Lake County, California

214—Sleeper variant-Sleeper loams, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hf8c Elevation: 1,250 to 2,500 feet

Mean annual precipitation: 25 to 40 inches Mean annual air temperature: 57 degrees F

Frost-free period: 150 to 250 days

Farmland classification: Not prime farmland

Map Unit Composition

Sleeper, variant, and similar soils: 50 percent

Sleeper and similar soils: 35 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sleeper, Variant

Setting

Landform: Hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Residuum weathered from sedimentary rock

Typical profile

H1 - 0 to 12 inches: loam H2 - 12 to 37 inches: clay loam H3 - 37 to 56 inches: clay H4 - 56 to 75 inches: clay loam H5 - 75 to 79 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: 75 to 79 inches to paralithic bedrock

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: R015XY009CA - Hills 20-40"ppt

Hydric soil rating: No

Description of Sleeper

Setting

Landform: Hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Concave, convex

Parent material: Residuum weathered from sedimentary rock

Typical profile

H1 - 0 to 12 inches: loam H2 - 12 to 45 inches: clay H3 - 45 to 55 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: 45 to 49 inches to lithic bedrock

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: R015XY009CA - Hills 20-40"ppt

Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 5 percent

Hydric soil rating: No

Rock outcrop

Percent of map unit: 5 percent

Hydric soil rating: No

Millsholm

Percent of map unit: 5 percent

Hydric soil rating: No

233—Still loam, stratified substratum

Map Unit Setting

National map unit symbol: hf8z Elevation: 600 to 2,000 feet

Mean annual precipitation: 25 inches Mean annual air temperature: 61 degrees F

Frost-free period: 150 to 205 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Still and similar soils: 85 percent *Minor components*: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Still

Setting

Landform: Alluvial flats

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Alluvium derived from sandstone and shale

Typical profile

H1 - 0 to 6 inches: loam

H2 - 6 to 52 inches: stratified loam to clay loam

H3 - 52 to 70 inches: stratified extremely gravelly loamy coarse sand to very

gravelly sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20

to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Rare Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 1 Land capability classification (nonirrigated): 3c

Hydrologic Soil Group: C

Ecological site: R014XG907CA - Loamy Bottom

Hydric soil rating: No

Minor Components

Cole, variant

Percent of map unit: 2 percent Hydric soil rating: No

Talmage

Percent of map unit: 2 percent Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent Hydric soil rating: No

Cole

Percent of map unit: 2 percent Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent Landform: Depressions Hydric soil rating: Yes

Kelsey

Percent of map unit: 2 percent Hydric soil rating: No

Lupoyoma

Percent of map unit: 2 percent Hydric soil rating: No

Xerofluvents

Percent of map unit: 1 percent Hydric soil rating: No

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