



# QUEST PLANNING

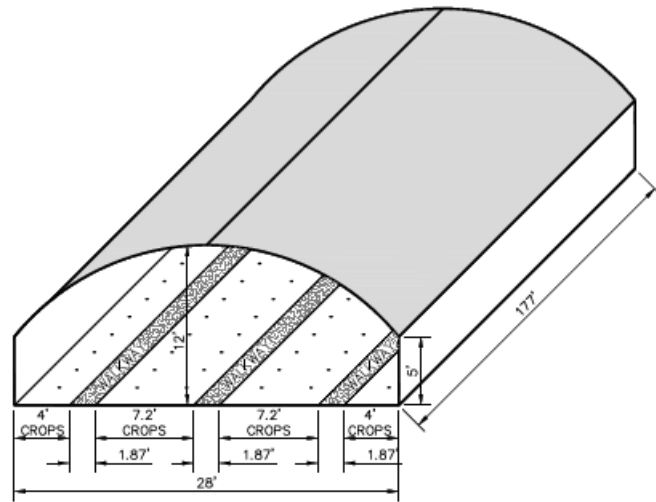
ENVIRONMENTAL PERMITTING • PROJECT MANAGEMENT

## **Shandon One Cannabis Cultivation DRC2018-00076 Project Description and Narrative**

- Applicant: Integrated Agriculture Inc.
- Property Owner: Kuhnle Properties Trust
- Address: 2500 Shandon Highway/Highway 41, Shandon, California 93461
- APN: 017-251-071
- Land Description: Zoned for agricultural use; the parcel is 196 acres and part of several legal parcels under contiguous ownership totaling approximately 3,213 acres. The project site is 5.6 acres, for which approximately 209 cy cut, 174 cy fill will be required, balancing onsite once subsidence and losses are considered. The parcel is developed with one residence, a barn, several small accessory structures located west of the project site and supports cattle and sheep grazing.
- Purpose: Obtain a Minor Use Permit for the following:
- Cultivation of 3 acres of outdoor cannabis under 3 sets of 11 temporary hoop structures within a securely fenced area that will provide vehicular access around the perimeter within the fence
  - Aggregate base parking area for up to five staff
  - Aggregate base access road to cultivation site from existing driveway west of existing residence and accessory structures
  - Temporary restrooms onsite for staff
  - Water and Equipment Storage
  - CalFire access, hammerhead turn around, and water connection provided
  - No harvested cannabis will be stored onsite
  - No processing activities will occur onsite
  - No public access to project site
  - Site construction anticipated to take 5 days

### **Cultivation Plan**

The applicant proposes to cultivate three acres canopy of cannabis outdoors under temporary hoop structures. The hoop framework consists of three sets of 11 temporary hoop structures, each measuring 28' wide by 177' long or 4,956 sf each and a total footprint of 163,548 sf, or 3.75 acres. Within each hoop structure crops will be planted in the ground along four rows with three 1.87' walkways in between for a total available canopy of 3964.8 sf within each hoop and an overall canopy of up to and not exceeding 3 acres.



**HOOP HOUSE CROP DESIGN DETAIL**  
NTS

### **Land Preparation**

Hoops are erected and covering installed consistent with County guidelines for temporary hoop structures open on two sides with no more than 5' tall sidewalls. The ground is prepared by typical agricultural disking methods with incorporation of organic green-waste compost to prepare the soil. Irrigation lines are set and planting rows are shaped to provide natural raised beds on the ground.

### **Planting**

Cannabis starts are delivered to the site ideally in early June and planted direct in the ground by hand by cultivation staff over the course of two days during daylight hours.

### **Nutrition/Pest Control and Management**

Fertilizer application consists of a 15:15:15 ratio of Nitrogen, Phosphorous, and Potassium when needed as determined by soil and plant tissue evaluation to determine fertility needs and design a fertilization program. Anticipated application is 400 pounds per acre to be incorporated into the beds during land preparation. In addition, gypsum may be incorporated into the soil at the rate of 2 tons per acre. All nutrient management will be tracked and monitored through the Regional Water Quality Control Board Cannabis Regulatory Program. A certified Pest Control Advisor/Certified Crop Advisor (PCA/CCA) will direct the nutrient and pest control program. Cannabis cultivators licensed by the California Department of Food and Agriculture (CDFA) Cal Cannabis division are required to comply with pesticide laws and regulations as enforced by the Department of Pesticide Regulation (DPR) and the County Agricultural Commissioner. Vertebrates are controlled with physical barriers, traps, and natural repellants castor oil and geraniol.

### **Irrigation**

Irrigation water is sourced from an existing well onsite and will be pumped via an irrigation line to the project site. Drip irrigation is used to match crop evapotranspiration and account for an estimated 85% irrigation efficiency. A water pump with capability to add nutrients into the irrigation will feed the cultivation site irrigation system.

### Harvest

The crop is harvested in late October over the course of 2-3 days. A crew of 10-12 harvesting staff will cut the plants from the stalk, conduct any required weighing activities, place harvested plant into totes and remove offsite in compliance with transport regulations to an offsite processing facility. Harvest activities will take place during daylight hours only, anticipated to take 1-3 days in total.

### Fencing

A 6' high slatted chain link fence will encompass the outdoor cultivation to provide both a visual barrier and security.

### Lighting

No artificial lighting will be installed aside from minimal solar-powered lighting mounted on the fence. Lighting will be shielded and manually activated in the case of a security incident during the hours of darkness. Once the incident is resolved, lighting will be turned off.

### Neighborhood Compatibility

Grazing land, vineyards and vacant properties surround this site. There are no schools; alcohol or drug facilities within 1,000 feet of this property. The nearest source is over more than 19,500' away is the Shandon Elementary School.

### Access

The existing property driveway will provide access to the project site located west of the residence and agricultural accessory structures on the property. A short extension of the driveway will provide an aggregate base access road to the project site.

### Parking Modification Request

A designated parking area with five spaces will be located adjacent to the outdoor cultivation site, outside of the fenced cultivation area. Refer to Site Plan for location. Section 22.18.050(B) requires 1 space for 1000 sf of outdoor cultivation area, which would equate to 131 spaces for the 3-acre outdoor cultivation area. In order to grant a parking modification, the following findings must be made:

- a. The characteristics of use, the site, or its immediate vicinity do not necessitate the number of spaces, types of design, or improvements required by this Chapter; and,
- b. Reduced parking or an alternative to the parking design standards of this Chapter will be adequate to accommodate on the site all parking needs generated by the use, or that additional parking is necessary because of special features of the use, site, or site vicinity; and,

- c. No traffic safety problems will result from the proposed modification of parking standards.

The characteristics of the use for the site do not necessitate the number of parking spaces required by this chapter. The plan is for strictly outdoor cultivation, one harvest per year, with no onsite processing activities. The cultivation strategy is for minimal-touch growing similar to a typical vegetable crop.

The planned yearly work schedule is as follows:

Planting/Site Preparation:	5 workers for 2 days
Growing:	5 workers one eight hour day per week for 5 months
Nutrient/Pesticide:	1 worker, three hours, every two weeks for 5 months
Harvesting:	10-12 workers for 2-3 days
Maintenance:	5 workers for 5 days each season

Reduced parking to 5 spaces will be adequate to accommodate all parking needs onsite generated by the use. Excluding harvesting, a maximum of 5 workers will be onsite simultaneously. For harvesting, all workers will carpool. Total number of cars onsite will not exceed 5. No traffic safety problems will result from the proposed modification of parking standards. All parking is located adjacent to the cultivation site.

#### Signage

No signage distinctive to the operation is proposed. Any posted private property or security signage required by the Sheriff's Department will be installed as directed.

#### Setbacks

The outdoor cultivation area meets the required setbacks of 300' at all property lines (front 3,909', rear 2,492', sides 2,492' and 18,294'. The nearest offsite residence is over 2,000' to the east.

#### Employee Safety and Training Plan

The Employee Safety and Training Plan is submitted under separate cover.

#### Security

Site security will be provided by a state-compliant security system and comply with any County Sheriff Department additional requirements. High definition cameras on board solar-powered, mobile security units will oversee ingress/egress locations and also surveil the cultivation area. Included on these units is manually-activated LED security lighting, using the All-Pro FSL2030LW box light (or similar). Each station will have two of these LED light systems, each providing 1950 lumens. All lighting will be shielded, and the only use will be for the illumination of security incidents at the site, during hours of darkness. Lights will be extinguished after resolution of the security incident. The normal state of the site will be "lights-out" at all times.

The detection of motion by the security system will trigger alerts to the mobile devices of trained security personnel, the permittee, the landowner, and other key personnel. Real-time video will be presented to the user so the appropriate action plan can be implemented.

Public access will be restricted and achieved with the installation of a security gate at the entrance to the parcel, and two security gates within the fence that surrounds the cultivation area. Each gate will include a keypad and intercom. All camera and gate locations are identified on the site plan; mobile stations will be located at inside the fence at the cultivation area (one at each corner and one each on the long sides of the cultivation area). An additional mobile unit will be located at the gated access to the parcel.

### Fire Safety

Cal Fire visited the site on 5/10/18 and provided recommendations for fire safety, which involved access and water storage requirements. As a result, the project has been designed to accommodate these fire safety measures, such as a widened shared access road and private 16' wide cultivation access roads around the growing operation.

A 9,500-gallon galvanized steel water tank will be installed on a compressed gravel pad outside the fence line. The tank will have a 4" fire hookup that will be accessible within 12' of the access road. The tank will also be used as a source of irrigation water for the grow sites. Accordingly, the tank will have a booster pump and a nutrient injection system.

### Odor Management

The proposed operation is not anticipating any odor nuisance since the nearest residence is over 2000' away; the area is dominated by agriculture and is very rural.

### Pesticide and Fertilizer Application

A list of pesticides and fertilizer products are included as an attachment to this project description. All products are non-hazardous and in compliance with the Department of Pesticide Regulation (DPR) and the County of San Luis Obispo Agricultural Commissioner (CAC).

Pesticide plan will evolve and change depending on pests we encounter on site and will be varied to avoid pest adaptation. Planned pesticides will be selected from the following list:

#### *Insecticides and Miticides*

Azadirachtin • Bacillus thuringiensis sub. kurstaki • Bacillus thuringiensis sub. israelensis • Beauveria bassiana • Burkholderia spp. strain A396 • Capsaicin • Cinnamon and cinnamon oil • Citric acid • Garlic and garlic oil • Geraniol • Horticultural oils (petroleum oil) • Insecticidal soaps (potassium salts of fatty acids) • Iron phosphate • Isaria fumosorosea • Neem oil • Potassium bicarbonate • Potassium sorbate • Rosemary oil • Sesame and sesame oil • Sodium bicarbonate • Soybean oil • Sulfur • Thyme oil

#### *Fungicides and Antimicrobials*

Bacillus amyloliquefaciens strain D747 • Cloves and clove oil • Corn oil • Cottonseed oil • Gliocladium virens • Neem oil • Peppermint and peppermint oil • Potassium bicarbonate • Potassium silicate • Reynoutria sachalinensis extract • Rosemary and rosemary oil • Sodium bicarbonate • Trichoderma harzianum

Vertebrate Repellants •

Castor oil

All pest management activity will be contracted out. No storage of pesticides will occur onsite.

## Issues Concerning Environmental Impact

### *Traffic*

The proposed operation is indicative of other agricultural operations in the County. A traffic report has been provided for the project site by Orosz Engineering.

### *Waste Management Plan*

For solid waste, a large waste bin will be located outside the fence line to the grow site, near the water tank. Trash pick-up services will be contracted, and the bin serviced when it is full. For compostable waste, all unused plant materials and soils will be shredded and tilled back into the soil after harvest. During the grow season, compostable waste will be maintained in a secured location within the fenced cultivation area.

### *Air Quality*

Gravel roads will be used on the parcel. Dust suppression measures will be applied to the access road. Additionally, the cultivation area will be ripped, disked just after the rainy season to strategize for cultivation. Onsite roads will also implement dust control measures in compliance with the Air Pollution Control District's CEQA Handbook Section 3.6.3.

### *Water*

The property is located within the Paso Robles Groundwater Basin- Level of Severity III (Shandon Subarea). Section 22.40.050.CD.5 specifies that cultivation sites requiring a land use permit and introducing new water demand to the site, must offset its water use at a 1:1 ratio. Project estimated water use is 3.56 acre-feet/year, which requires an offset of 3.56 acre-feet/year. The offset will be achieved by implementing offsite agricultural water use retrofits in accordance with the County's program.

### *Water Management Plan*

Proposed water supply, use and conservation measures are provided in the project's Water Management Plan prepared by the Wallace Group. Wallace Group based their cultivation water use rates based on the Central Coast Regional Water Quality Control Board's cannabis development teams estimates of 0.03 gal/sf canopy/day for outdoor cannabis plants. The project is estimated to yield 1.80 AFY.

### *Biological*

A Biological Resources Assessment is provided in accordance with the County of San Luis Obispo Guidelines for Biological Resources Assessments. This report identifies potential adverse impacts to sensitive biological resources and provides recommended avoidance, minimization, and mitigation measures as required to avoid or reduce those impacts.

A San Joaquin Kit Fox Habitat Evaluation Form, including the final score, has been provided.