Cultivation & Operations Plan Larabee Farm, LLC 33865 Highway 36 Bridgeville CA APN #: 210-051-070

Application #: 11888

Proposed Medical Cannabis Cultivation Facilities
Humboldt County Planning Department
3015 H St.
Eureka, CA 95501

Project Summary

Larabee Farm, LLC is proposing to permit existing medical cannabis cultivation activities in accordance with the County of Humboldt Commercial Medical Marijuana Land Use Ordinance (CMMLUO). The project requires a Special Permit (SP) for a total of 9,000 SF of Pre-Existing Mixed Light Cultivation in the following structures. GH#1: 30'x100' (3,000 SF), GH#2: 30'x100' (3,000 SF), GH#3: 30'x100' (3,000 SF) for a total of 9,000SF. The applicant proposes a 20'x50' (900 SF) Ancillary Nursery located in the Drying and Curing Structure. The project has a 2,357 SF ancillary agricultural building use for propagating immature plants and drying, curing processing of cannabis product. The greenhouse ancillary and indoor nursery will not exceed the allowed 900 SF area at any given time. There is a (1) 486 SF shed that is used as a secured Cannabis Storage Area, (1) 130 SF shed that is used to store cultivation nutrients and pesticides and (1) 190 SF shed with concrete floors and secondary containment that is used to store a 500-gallon fuel tank and backup generator. Power is supplied from PG&E with the generator being used only during power outages when require for operators. Water is sourced from a non-hydrologically permitted well. Annual water use is 95,000 per year or 10.21-gallons per/sf.

Site Description

The Project is located at 33865 Highway 36. To reach the site from Eureka, CA take Highway 101 for 19.9 miles to exit 685 to Highway 36. Follow Highway 36 33 miles. The Driveway is located on the left.

Land Use

The subject has a general plan designation of dispersed housing, as identified by the Northern Humboldt General Plan (NHGP) and is zoned FR-B-5 (20).

State & LocalCompliance

Larabee Farm, LLC currently holds a Provisional State License Number CCL18-0003100. The license will be transitioned to an Annual License after local approval is completed.

North Coast Regional Water Quality Control Board

Larabee Farm, LLC was in complete compliance with NCRWB (WDID#1B161101CHUM) and has made the transition into The State Water Resource Control Board. Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation & Associated Activities or Operations, With Similar Environmental Effects. A Water Resource Protection Plan has been developed for the project by Six Rivers Construction & Consulting and has been implemented for activities associated with onsite cultivation since August 2016.

State Water Resource Control Board

A total of 1 watercourse exists on the property. Water for domestic and cannabis irrigation is provided by a 120' deep permitted well which is not hydrologically connected. P.O.D. is identified on the plot map and is located at Latitude 40.2659, -123.4120. The applicant has enrolled transitioned to the State Water Resource Control Board, under Order WQ 2017-0023-DWQ. A Hydrological Isolation of Existing Well from Surface Water Report was completed by Lindberg Geologic Consulting to assess the well connectivity and has been submitted to the planning department.

Water Storage:

Water storage for irrigation use is provided in the form of water storage tanks. The property currently has (3) 5,000 gal, (5) 350 gal, (4) 500 gal tanks. Larabee Farm, LLC has a total 19,750 gallons of hard water storage.

Water Use:

Table 3.1 Estimated Annual Irrigation Water Usage (gal/month)											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	7,000	10,000	10,000	15,000	17,000	17,000	12,000	7,000	0	0

Site Drainage, Runoff, & Erosion Control

Larabee Farm, LLC is enrolled with the North Coast Regional Water Quality Control Board (NCRWQCB) for Tier 2 coverage and has transitioned into the new order under the State Water Resource Control Board. A WRPP and SMA have been developed and submitted to the appropriate agencies.

Erosion Control

The Water Resource Protection Plan (WRPP) includes erosion and sediment control BMP's designed to prevent contain and reduce sources of sediment. The WRPP also includes corrective actions to access road maintenance. Additionally, the WRPP requires mulch piles and spoils from any grading to be stored in a designated location away from the watercourse. Please refer to the WRPP section titled *Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities* located in *Appendix H* for complete BMP recommendations and specifications.

Watershed and HabitatProtection

Adherence to the Water Resource Protection Plan ensures that the watershed and surrounding habitat are protected. The cultivation activities and associated structures are > 150 ft. from the nearest watercourse, providing a suitable buffer between cultivation operation and habitat. Additionally, site development and maintenance activities utilize BMP's in accordance with the NCRWQB/SWRCB recommendations. Any grading and earthwork activities will be conducted by a licensed contractor in accordance with approved grading permits, signed Lake and Streambed Alteration Agreement with CDFW and the WRPP. Refer to *Appendix H* for detailed descriptions of watershed and habitat protection measures.

Monitoring & Reporting

Annual water uses and reporting is completed annual. A copy of these reports is available onsite or by request.

California Department of Fish & Wildlife

A 1601 Notification was completed by Chris Carrol at Timber Resource Consultants. The applicant received a Notice of Self Certification Exemption.

Energy & Generator Use

On Grid power is provided by PG&E for domestic and agricultural use. There is one 45k

generator that is used as a backup power source in an event of a power outage. The decibel readings have been taken from various areas of the property and the results found that at 100+ the meter did not exceed 39 decibel standard which falls well within all agency specification. Maintenance and use logs are on-site and available upon request.

Use and Storage of Regulated Products

Best Management Practices (BMP's) are employed when storing, handling, mixing, application, and disposal of all fertilizers, pesticides, and fungicides. All nutrients, pesticides, and fungicides are in a locked storage room, and contained within water-tight, locked and labeled containers, in accordance with manufacturers instruction. Application rates will be tracked and reported with the end of the year monitoring report required in the WRPP. Employees are trained to safely handle such pesticides, as before stated in section 2.6-3. See *Appendix H*, *WRPP* for complete BMP specifications for the use and storage of regulated products. Spill kits and eye wash stations are located onsite by nutrient and pesticide mixing areas and fuel storage areas.

Fertilizers

Nutrients and biological inoculants used for cultivation include:

Max Sea (16-16-16)

Max Sea (3-20-20)

Bio Bud (.5-.1-1)

Beneficial Living Center and Garden Supplies Organic Compost Tea (See SDS for additives.)

Pesticides & Fungicides

Pesticides and fungicides used for cultivation include:

Diatomaceous Earth

Neem Oil

Green Cleaner

Plant Therapy

Fuel & Oil

Larabee Farm, LLC has a 500-gallon fuel tank located by the cultivation area. Fuel is stored in an enclosed fuel shed with concrete floors. The fuel tank is also stored in secondary containment. Spill kits, fire extinguisher, and eye wash stations are located by all fuel storage.

Waste Management Plan

Trash and recycling containers are located near the processing building in a safe, enclosed location. Solid waste and recycling are hauled off-site to 965 Riverwalk Dr. Fortuna, CA 95540. Organic waste from cultivation is composted. Spoiled soil is stored in an controlled area surround by straw waddles and covered during the winter months to control runoff.

Wastewater Management

The water management plan aims to achieve an entirely close-cycled irrigation and nutrient system. Hand watering methods minimize the over-irrigation of plants and subsequent runoff. The septic is on file with the county. The septic system is maintained as recommended.

Humboldt County BuildingDepartment

All necessary building permits will be obtained per the conditions of approval of the permit.

Cal Fire

The subject property is located within a State Responsibility Area (SRA) for fire protection. Several improvements are proposed in order to meet SRA requirements, including designation of a fire turn out area for emergency vehicles, and management of trees and vegetation around existing structures to maintain the required 100 ft. defensible space. All structures on the property meet the 30 ft. SRA setback requirement from property lines. Fire extinguishers are located at all greenhouse structures, processing facility and fuel areas. The applicant has a marked 3,000-gallon water storage tank that is designated for Cal Fire use.

Cultivation Plan

Larabee Farm cultivates (3) mixed light grow cycles per year. Greenhouses are equipped with complete automated greenhouse controllers that regulate climate, lights, and light deprivation tarps.

Cultivation Schedule

January: Site Monitoring and Preparation for planting. Clones are propagated onsite.

February: Clone propagation continues. 1St Cultivation cycle is planted.

March: Clone Propagation continues. Plants in vegetative grow stage.

April: Plants are changed to flower grow stage.

May: Clones are transitioned from indoor propagation area to ancillary nursery. Plants in flowering greenhouses remain in flower.

June: 1st harvest. Replanting of flowering greenhouses with plants from ancillary nursery.

Plants are immediately flipped to flower. Clones are propagated for next grow cycle.

July: Clone propagation continues. Plants in flowering greenhouses remain in flower.

August: 2nd harvest. Replanting of flowering greenhouses with plants from ancillary nursery. Plants are immediately flipped to flower.

September: Clone propagation continues. Plants in flowering greenhouses remain in flower.

October: 3rd harvest. Clone inventory is cleared and mothers that will not be used for the following year are discontinued/destroyed.

November/December: New Mother Plants arrive onsite and remain in the indoor propagation area for the upcoming season.

Harvesting, Drying & Trimming

Harvested plants are hung in the ancillary ag structure for approximately two weeks. Dried flowers are then bucked into manageable buds and processed at an on-site processing with a trim machine on-site.

Employee Plan

There are two full time seasonal employees between March-November. Two additional day

labors will be used as day labor during planting and harvesting periods. Portable ADA compliant restroom and handwash station will be within the required 250' of all employees work areas.

On-Site Housing

The existing single-family residence located on site occupied by the property owner/applicant. This residence is for non-cannabis use. Employees live off-site and commute daily to the cultivation site via carpool and personal forms of transportation.

Security Plan & Hours of Operation

The cultivation facilities including the greenhouses and processing buildings are enclosed in a secure fence behind two locked gates. The main entry gate is located off of HWY 36 and is a shared roadway with neighboring parcels. The entry gate to the cultivation area is located off the shared roadway and always remains locked. Restricted access signs are posted conspicuously at the entry gates. The cultivation and processing facility area will have low intensity exterior lighting to illuminate the entrances and will include a small number of motion activated security lights. Security cameras are installed at the entry gate and entrances to the facilities.

Hours of Operation

Business hours are Monday-Friday 9am to 5pm.