



**GREEN
ROAD
CONSULTING**

Site Plan Overview and Cultivation and Operations Plan

Applicant: Edward Cox

Address: 3225 Freese Ave. Eureka, CA 95503

APN: 317-182-019

Agent

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I. Site Plan Overview

1.0 Project Information

Edward Cox (“Applicant”) is submitting this application for a Type 3 Conditional Use Permit for 12,200 square feet of existing Outdoor Commercial cannabis cultivation on a 20-acre parcel, located in Bridgeville, CA, Assessor’s Parcel Number (“APN”) 317-182-019.

This application is submitted through his agent, Dante Hamm of Green Road Consulting, Inc., and has been prepared in accordance with Humboldt County’s Commercial Medical Marijuana Land Use Ordinance (“CMMLUO”).

The Type 3 Conditional Use Permit would achieve the following results for the Applicant:

- a. Permit 12,200 square feet of outdoor commercial cannabis cultivation activities that were in existence prior to January 1, 2016, in compliance with the County CMMLUO and
- b. Comply with applicable standards for water quality maintenance and watershed protection through the Waiver of Waste Discharge requirements of the North Coast Regional Water Quality Control Board (“Water Board”) and California Department of Fish and Wildlife (“CDFW”).

2.0 Project Location

The Applicant’s Parcel is located in the inland zone of Humboldt County near Bridgeville, CA. The Parcel is comprised of 20-acres and is identified by Assessor’s Parcel Number 317-182-019.

2.1 Zoning Classification

The County’s Zoning Classification of the Parcel is U with a Current General Plan of AG. The CMMLUO permits existing Outdoor commercial cannabis cultivation on land zoned as U with cultivation sites between 10,000 square feet and 43,560 square feet with a Type 3 Conditional Use.

2.2 Site Topography

A map of the Parcel’s topography is included as Attachment “A.”

3.0 Easements

The following information is taken from Exhibit “A” of the recorded Grant Deed, a copy of which is included in the Evidence of Ownership and Authorization section of this Application.

EXHIBIT "A"

Legal Description

For APN/Parcel ID(s): 317-182-019 and 317-182-020

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA IN COUNTY OF HUMBOLDT, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

TRACT A:

The North Half of the Northeast Quarter of the Southwest Quarter of Section 35, Township 3 North, Range 4 East, Humboldt Meridian.

TRACT B:

PARCEL ONE:

The East Half of the Northwest Quarter of Section 35, Township 3 North, Range 4 East, Humboldt Meridian.

Said land being Parcel 1 as shown on Parcel Map No. 977 filed in the office of the Humboldt County Recorder in Book 8 of Parcel Maps, Page 115

PARCEL TWO:

Easements to construct, reconstruct, maintain and use a private road 50 feet in width as set forth in Exchange of Road

Easements executed by Sierra Pacific Holding Company, R.H. Emmerson and Son, LLC, Arkiey Family Trust and Androm-Ryedal Company Inc., recorded June 16, 1999, as Document No. 1999-17539-7, Humboldt County Official Records.

PARCEL THREE:

Easement for ingress and egress over the route commonly known as Stapp Road, as set forth in Stipulated Judgment Re: Stapp Road Access, Humboldt County Superior Court Case No. 77289, a certified copy of which was recorded August 20, 1990, as Document No. 1990-19730-2, Humboldt County Official Records.

PARCEL FOUR:

A non-exclusive easement for ingress and egress for recreational and residential purposes over and across the existing road which begins on the south line of the Northeast Quarter of the Northwest Quarter of Section 34, Township 3 North, Range 4 East, Humboldt Meridian and runs in a general northerly direction to a point on the east line of the Southeast Quarter of the Southwest Quarter of Section 27, Township 3 North, Range 4 East, Humboldt Meridian.

Being the same as granted in the deed from Glenda D. Stapp, trustee recorded August 28, 2013 as Instrument No. 2013-20135-3, Humboldt County Official Records. Said road strip being more particularly shown on Exhibit B attached to said deed.

PARCEL FIVE:

A non-exclusive easement for ingress and egress for all legal purposes over and across the existing road running through the Southeast Quarter of the Southwest Quarter and the Southwest Quarter of the Southeast Quarter of Section 26 and through the North Half of the Northeast Quarter of Section 35, Township 3 North, Range 4 East, Humboldt Meridian. And also the right to construct a new road running southerly from the existing road in said Southeast Quarter of the Southwest Quarter of Section 26.

4.0 Natural Waterways

There are no natural water courses on this property.

5.0 Location and Area of Existing Cultivation

The 12,200 square feet of outdoor cannabis cultivation occurs in two (2) general areas on the parcel.

Outdoor Cultivation

CA#1

CA#1 is an irregularly shaped cultivation area that consists of 9,000 ft² of full-sun (outdoor) cultivation area.

GH#1/#2

GH #1 and #2 are 80'x20' (1,600 ft² each) greenhouses totaling 3,200 ft² of light deprivation (outdoor) canopy area.

6.0 Setbacks of Cultivation Area

All cultivation is set back from any point at the parcel boundary by 100 ft or more.

7.0 Access Roads

The Parcel is located off of Stapp Road which is maintained by the County of Humboldt's Public Works Department.

8.0 Graded Flats

There may be graded flat that would require permitting through the Planning and Building Department.

9.0 Existing Buildings

Multi-Use Building

The Multi-Use building is an existing 35'x45', it was constructed sometime in the 1970s. The building is used for harvest storage, drying, and propagation.

Generator Shed

The Generator Shed is an existing 16'x16', it was constructed sometime in the 1970s. It is used for to store a 7.5KW generator, generator fuel, and nutrients.

10.0 Water Source, Storage, Irrigation Plan and Projected Water Usage

10.1 Water Source

The Applicants source of water is a permitted ground water well. A 1600 notification has been submitted to CDFW. In the Applicants 1600 the permitted well was disclosed and

identified as the Applicants sole source of irrigation for cannabis. Once the department has issued a Final LSAA, a copy will be provided to your office.

10.2 Water Storage

- One (1) 5,000-gallon HDPE tank.
- Two (2) 2,500-gallon HDPE tank.
- One (1) 1,500-gallon HDPE tank.

**Total=9,000 gallons*

10.3 Irrigation Plan

The Applicant uses a combination of hand watering and a drip system for irrigation.

10.4 Projected Water Use

The amount of water used for the cultivation of cannabis will vary throughout the year, with peak periods of water use occurring during the summer months.

Table 1. Annual water uses on the parcel.

Source	Use	Start Date	End Date	To Storage (gallons)	To Use (gallons)
Well	Domestic	Apr. 1	Nov. 1		40,000
Well	Cannabis	Apr. 1	Nov. 1		81,200

11.0 Irrigation Runoff, Erosion Control Measures and Watershed Protection

The following information was taken directly from the applicants SMP. Map points identified are referencing the maps provided in the Applicants SMP.

Erosion Control Measures/ Irrigation Runoff/ Watershed Protection

The disturbed areas consist of the cultivation areas as shown on the Disturbed Area map. A portion of the disturbed area surrounding CA3 was found to be within the riparian setback of a Class III watercourse. The area was considered disturbed, because it was showing signs of rill erosion which led to the heavily vegetated bank of a Class III watercourse (**MP7**). The graded flat which CA3 resides on shall have adequate drainage and erosion control features installed prior to the wet season to prevent increased erosion and promote stability. At **MP4** an approximately 1,500 ft² portion of fill slope for CA3 was observed to be cracking and actively slumping. It’s believed that the instability originates from poor drainage during the winter and not from over irrigating cannabis. Adequate drainage features shall be installed to de-water the flat and erosion control features shall be installed to promote slope stability. A more in-depth analysis and solutions to erosion control and drainage features will be discussed in the required “Disturbed Area Stabilization Plan” and “Site Erosion and Sediment Control Plan”. At **MP6** a shower was observed to be located within the riparian setback of a Class III watercourse. The shower shall be relocated to a stable area outside of riparian setbacks. The landowner is advised to create a retention basin, bioswale or French drain to capture shower water and prevent erosion.

12.0 Distances from Significant Landmarks

There are no schools, school bus stops, state parks, places of worship or Tribal Cultural Resources within 600 feet of the cultivation site.

II. Cultivation and Operations Plan

1.0 Materials Storage

Pesticide/Fertilizer Storage

(The following information was taken directly form the Applicants SMP)

All fertilizers and pesticides are kept in the multi-use building on APN: 317-182-019 and in a covered structure near CA3 on APN: 317-182-020. All pesticides and fertilizers are equipped with secondary containment and are mixed or prepared in locations where they cannot enter a waterbody (surface or groundwater). Fertilizers and pesticides shall be applied at agronomic rates specified on the product label. The enrollee will keep a log of their fertilizers and pesticides use for annual reporting. All labels will be kept, and directions followed when amendments and fertilizers are applied. All liquid chemicals will be stored in separate secondary containment. During the off season all chemicals will be stored in a covered building with secondary containment. Agricultural chemicals will not be applied within 48-hr of a predicted rain event with a 50% or greater chance of 0.25-inches. Disposal of unused products will be consistent with labels on containers. Empty containers will be disposed of at an authorized recycling center. A spill clean-up kit will be stored in the multi-use building. No restricted materials or pesticides will be used or stored on site. Based on the permitted cannabis cultivation area of 45,434 ft² the cultivator currently uses 297.2 pounds of nitrogen per acre per year. No greater than 319 pounds of nitrogen per acre per year shall be applied. A summary of fertilizers and pesticides used annually are listed below in Table 5.

Table 5. Overview of annual chemical use.

<u>Product Name</u>	<u>Chemical Type</u>	<u>N-P-K or Active Ingredient</u>	<u>Annual Use (lbs. or gallons)</u>
<u>Stutzman Chicken Manure</u>	<u>Fertilizer</u>	<u>3-2-2</u>	<u>10,000 lbs</u>
<u>Canna Coco A</u>	<u>Fertilizer</u>	<u>4-0-1</u>	<u>20 gal</u>
<u>Canna Coco B</u>	<u>Fertilizer</u>	<u>1-4-2</u>	<u>20 gal</u>
<u>Plant Therapy</u>	<u>Pesticide</u>	<u>Essential Oils</u>	<u>2 gal</u>

Petroleum Product Storage

(The following information was taken directly from the Applicants SMP)

The site is not grid tied and uses generators as its primary source of power. Generators and their associated fuel canisters were observed to be stored with adequate secondary containment, in a covered structure and outside of riparian setbacks. Generators are kept in the generator shed (see Site Overview map). At all times the generators will need to be stored with adequate secondary drip containment outside of riparian setbacks and in stable areas. Fueling of the generators, as well as any other equipment or vehicles, will also take place outside of the riparian setbacks. All equipment containing petroleum derivatives will be inspected regularly for leaks. When the generators are not in use they will be stored in a covered building. A summary of annual petroleum is listed below in Table 6.

Table 6. Overview annual petroleum usage.

Product	Chemical Type	Annual Use (lbs. or gallons)
Gasoline	Petroleum	150 gallons
Motor Oil	Petroleum	4 gallons

Generator Specification

Honda EU 7KW:

Engine	Honda GX390 EFI
Displacement	389cc
AC Output	120/240V 7000W max. (58.3/29.1A) 5500W rated (45.8/22.9A)
Receptacles	20A 125V GFCI Duplex (2), 30A 125V Locking Plug, 30A 125/250V Locking Plug
DC Output	N/A
Starting System	Recoil, electric
Fuel Tank Capacity	5.1 gal.
Run Time per Tankful	6.5 hrs. @ rated load, 18.0 hrs. @ 1/4 load
Dimensions (L x W x H)	33.4" x 27.6" x 28.4"
Noise Level	58 dB(A) @ rated load, 52 dB(A) @ 1/4 load
Dry Weight	261 lbs.
Residential Warranty	3 Years
Commercial Warranty	3 Years

Decibel Reading:

Estimating Sound Levels With the Inverse Square Law

In the real world, the [inverse square law](#) is always an idealization because it assumes exactly equal sound propagation in all directions. If there are reflective surfaces in the sound field, then reflected sounds will add to the directed sound and you will get more sound at a field location than the inverse square law predicts. If there are barriers between the source and the point of measurement, you may get less than the inverse square law predicts. Nevertheless, the inverse square law is the logical first estimate of the sound you would get at a distant point in a reasonably open area.

If you measure a sound level $I_1 = 58$ dB
 at distance $d_1 = 0.3048$ m = 1 ft

$$\frac{I_2}{I_1} = \left[\frac{d_1}{d_2} \right]^2$$

then at distance $d_2 = 30.48$ m = 100 ft

the inverse square law predicts a sound level $I_2 = 18.0000000$ dB

[Index](#)
[Auditorium acoustics](#)

You can explore numerically to confirm that doubling the distance drops the intensity by about 6 dB and that 10 times the distance drops the intensity by 20 dB.

<http://hyperphysics.phy-astr.gsu.edu/hbase/Acoustic/isprob2.html>

Honda EU 2.2KW:

Full model name	EU2200ITA
Engine	Honda GXR120
Displacement	121cc
AC Output	120V 2200W max. (18.3A), 1800W rated (15A)
Receptacles	20A 125V Duplex
DC Output	12V, 100W (8.3A)

Starting System	Recoil
Fuel Tank Capacity	.95 gal
Run Time per Tankful	3.2hr @ rated load 8.1 hrs @ 1/4 load
Dimensions (L x W x H)	20.0" x 11.4" x 16.7"
Noise Level	57 dB(A) @ rated load 48 dB(A) @ 1/4 load specLink.Display
Dry Weight	46.5 lb.
Residential Warranty	3 Years
Commercial Warranty	3 Years

Decibel reading will not exceed 50 dB(A) from any point at the parcel boundary.

Trash/Refuse

(The following information was taken directly form the Applicants SMP)

All trash is placed in a sealed container and kept in a multi-use building. All trash is taken to a landfill/transfer station on an as needed basis. No trash or debris will be allowed to enter a watercourse or riparian setback area. Compostable cultivation waste will be stored in a location and manner where it cannot be transported to surface waters. Spent growth medium (e.g. soil) shall either be reused, disposed of at an appropriate waste site, or be spread outside of riparian setbacks and planted with native vegetation.

Soils Management Plan

The Applicant reamends their soil for each cultivation cycle in order to reduce the amount of imported soil the cultivation activities may take. Barring the use of salt-based fertilizers, soil may be re-amended for cultivation for years before it requires replacing, if ever.

Should the soil ever be found no longer viable for cultivation, it is removed and disposed of at an approved waste management facilities green waste center. Should the Applicant utilize a green waste center, they will obtain a receipt and store it within their records.

Sanitation Facilities

The Applicant has an unpermitted septic attached to Cabin #1. This septic will either need to be decommissioned or permitted with the department of environmental health within two years of the Applicant receiving their CUP. Until the existing septic can be permitted or a new one designed, permitted and installed, the Applicant will provide all those working on the property with serviceable portable toilets.

2.0 Cultivation Activities

The Applicant propagates on site within the Multi-Use Building.

The Applicants cultivation schedule may vary due the climate, strain, and Applicants personal schedule.

Cultivation Schedule

The light depravation and mixed light cultivation schedule are as follows:

1st Run

March-April: Veg
April-July: Flower
July: Harvest

2nd Run

July-August: Veg
August-November: Flower
November: Harvest

The Applicant anticipates one annual harvest from their full-term (outdoor) cultivation the cultivation schedule is as follows.

May-June: Veg
June-October: Flower
November: Harvest

Employee Safety Practices

The Applicant anticipates using 2-3 seasonal employees.

All those working on the property will be instructed in safe and proper techniques for performing any duties pretraining to cultivation. This includes the utilization of personal protective equipment and proper use of tools and necessary instruments required for the performance of one’s duties. Personal protective equipment shall be provided for all employees and/or independent contractors via the proponent as well as having ample personal protective equipment in stock and onsite. Clean and safe drinking water will be in the form of filtered spring water. For the safety of the public and employees working while intoxicated will not be tolerated. All Employee and/or independent contractors shall be made aware of the following.

- I. Location of fire extinguishers and the “P.A.S.S” technique.
- II. List of operations manager contacts;
- III. List of emergency control contacts;
- IV. List of poison control contacts;
- V. Location of first aid kit;
- VI. Location of Restroom and hand washing stations;
- VII. Location of clean drinking water and;
- VIII. Location of Personal protective equipment.

All work surfaces and equipment are maintained in a clean, sanitary condition. Protocols to prevent the spread of mold are strictly followed.

International Dark Sky Standards

Please note greenhouses will not contain Artificial lighting. The Applicant will ensure they abide by the international dark sky standards

Humboldt County Code 314-43.1.3.2

The Greenhouses do not have foundation or developed pathways within the greenhouses and are compliant with HCC 314-43.1.3.2

3.0 Processing Practices

Until the Applicant can permit an appropriate structure, the Applicant will utilize an offsite licensed third-party processor.

All work surfaces and equipment are maintained in a clean, sanitary condition. Protocols to prevent the spread of mold are strictly followed. The final cannabis product is stored in a secure location.

The Applicant will be utilizing any Track and Trace program the County seeks to implement, abiding by all appropriate record keeping practices.

4.0 Security Measures

The access to the parcel is gated and locked. There are game cameras placed over the gate, buildings and cultivation areas.