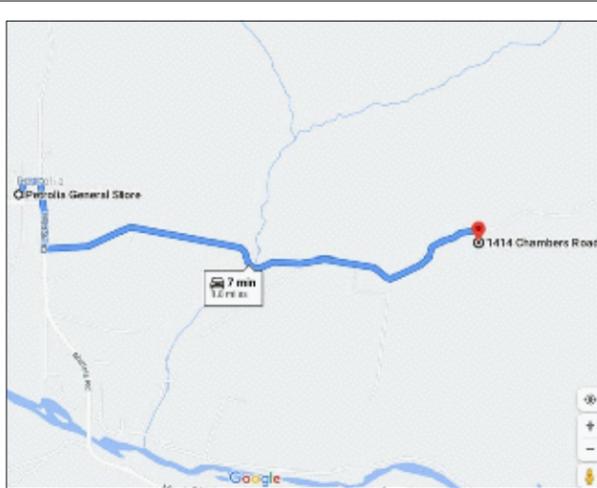


## ATTACHMENT 3A

### Appendix 1 Cover Sheet

<u>Document Title</u>	PDF Page No.
Site Plans (OurEvolution Engineering, November 2021)	2-3
Project Description (Cenci Consulting, December 2021) Cultivation and Operations Plan (Cenci Consulting, December 2021)	4-17 18-61



**DRIVING DIRECTIONS FROM PETROLIA GENERAL STORE**

1. HEAD NORTH ON SHERMAN AVENUE
2. TURN RIGHT ON GRANT STREET
3. CONTINUE ONTO OLD COAST WAGON ROAD
4. CONTINUE ONTO MATTOLE ROAD (0.2 MILES)
5. TURN LEFT ONTO CHAMBERS ROAD (1.5 MILES TO GATE)

**PROJECT INFORMATION**

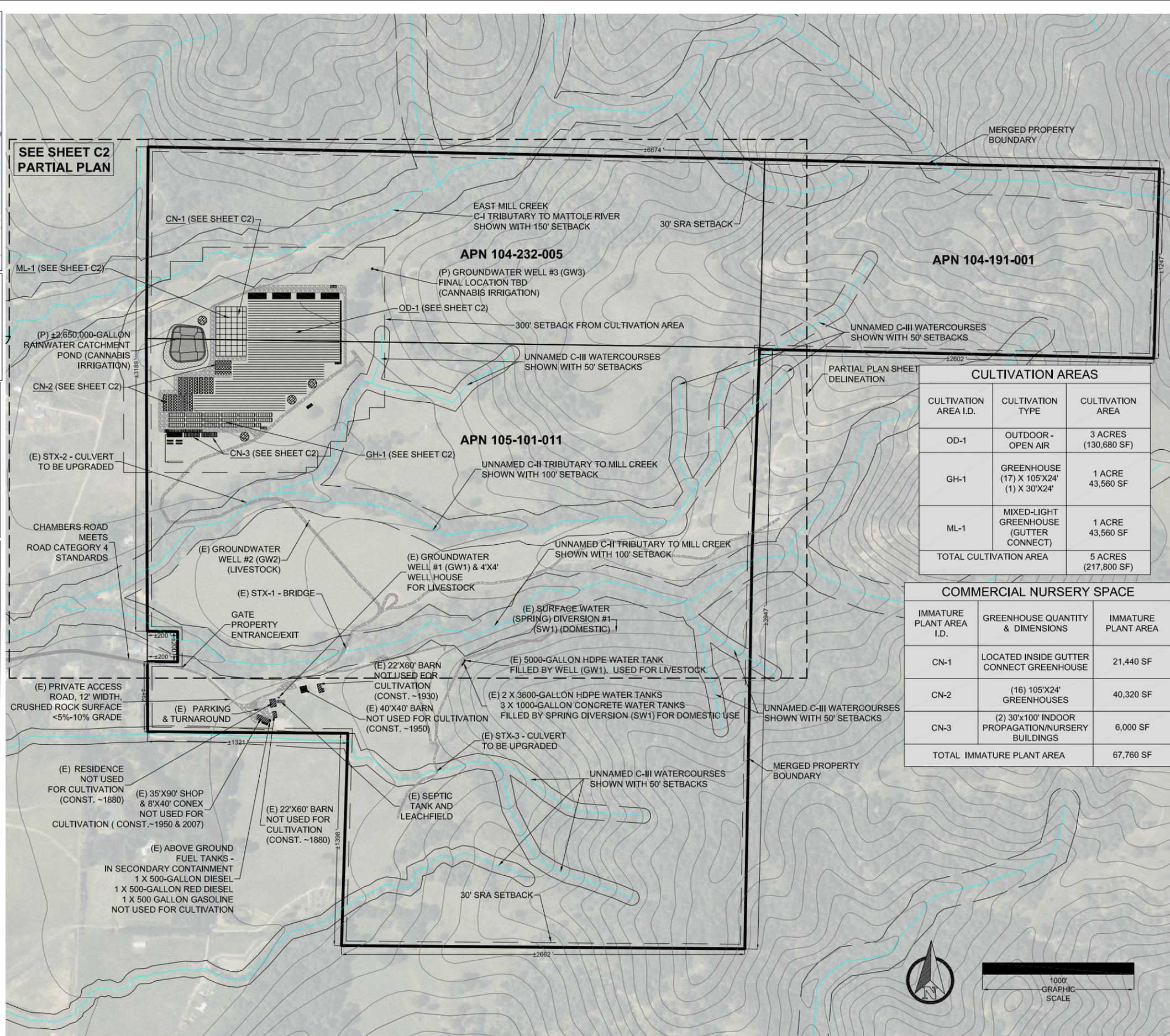
APPLICANT: CISCO FARMS, INC.  
 PROPERTY OWNER OF RECORD: BENEMANN FAMILY TRUST  
 OWNER ADDRESS: PO BOX 1083, TRINIDAD, CA 95570  
 APN: 105-101-011, 104-232-005 & 104-191-001  
 PROPERTY ADDRESS: 1414 CHAMBERS ROAD, PETROLIA, CA 95558  
 HUMBOLDT COUNTY CANNABIS PERMIT APPLICATION: TBD  
 MERGED PROPERTY SIZE: 517 ACRES  
 HUMBOLDT COUNTY ZONING: AE-B-5(160)

**GENERAL NOTES**

1. NO SCHOOLS, SCHOOL BUS STOPS, PLACES OF WORSHIP, PUBLIC PARKS, OR KNOWN TRIBAL CULTURAL RESOURCES WITHIN 600 FEET OF CULTIVATION SITES.
2. NO OFF-SITE RESIDENCES WITHIN 300 FEET OF CULTIVATION SITE.
3. NO UNDEVELOPED PARCEL BOUNDARY WITHIN 300' OF CULTIVATION SITE.
4. NO CULTIVATION OR OPERATIONS WITHIN STREAMSIDE MANAGEMENT AREAS.
5. ALL KNOWN WATERCOURSES SHOWN WITH STREAMSIDE MANAGEMENT AREA BUFFERS.
6. APNS 104-232-005, 104-191-001 & 105-101-011 CONSTITUTE ONE LEGAL PARCEL.
7. CALFIRE WATER STORAGE TANKS TO BE EQUIPPED WITH 2.5" OUTLET W/MALE AMERICAN NATIONAL FIRE HOSE SCREW THREADS.
8. PROPERTY BOUNDARIES SHOWN ARE BASED ON HUMBOLDT COUNTY GIS AND MERGER SURVEY MAPS COMPLETED BY ED GORGE JR., PLS

**CULTIVATION WATER SOURCE & STORAGE**

1. (P) RAINWATER CATCHMENT
  2. (P) GROUNDWATER WELL (GW3)
- WATER STORAGE**
1. (P) 40 X 5,000 GALLON HDPE WATER STORAGE TANKS - 200,000 GALLONS
  2. (P) RAINWATER CATCHMENT POND - 2,650,000 GALLONS
- TOTAL WATER STORAGE: 2,850,000 GALLONS**  
 10,000 GALLONS TO BE HELD IN RESERVE FOR FIRE SUPPRESSION WITH CALFIRE SRA STANDPIPE AND TURNAROUND AREA AS NOTED ON C2.



CULTIVATION AREAS		
CULTIVATION AREA I.D.	CULTIVATION TYPE	CULTIVATION AREA
OD-1	OUTDOOR - OPEN AIR	3 ACRES (130,680 SF)
GH-1	GREENHOUSE (17) X 105'X24' (1) X 30'X24'	1 ACRE 43,560 SF
ML-1	MIXED-LIGHT GREENHOUSE (GUTTER CONNECT)	1 ACRE 43,560 SF
TOTAL CULTIVATION AREA		5 ACRES (217,800 SF)

COMMERCIAL NURSERY SPACE		
IMMATURE PLANT AREA I.D.	GREENHOUSE QUANTITY & DIMENSIONS	IMMATURE PLANT AREA
CN-1	LOCATED INSIDE GUTTER CONNECT GREENHOUSE	21,440 SF
CN-2	(16) 105'X24' GREENHOUSES	40,320 SF
CN-3	(2) 30'X100' INDOOR PROPAGATION/NURSERY BUILDINGS	6,000 SF
TOTAL IMMATURE PLANT AREA		67,760 SF



1000' GRAPHIC SCALE



OUREVOLUTION ENGINEERING, INC.  
 1821 BUTTERMILK LANE  
 ARCATA, CA 95521  
 360.791.3259  
 ANDY@OUREVOLUTION.COM

NO.	HISTORY / REVISION	BY / CHK	DATE

CISCO FARMS, INC.  
 MERGED PROPERTY APNs 105-101-011, 104-232-005 & 104-191-001  
 1414 CHAMBERS ROAD, PETROLIA, CA 95558

**CULTIVATION SITE PLAN OVERVIEW**

DRAWN	ACS
CHECK	GAC
APPROVED	ACS
DATE	12/09/2021
JOB NUMBER	CF-001

SHEET C1



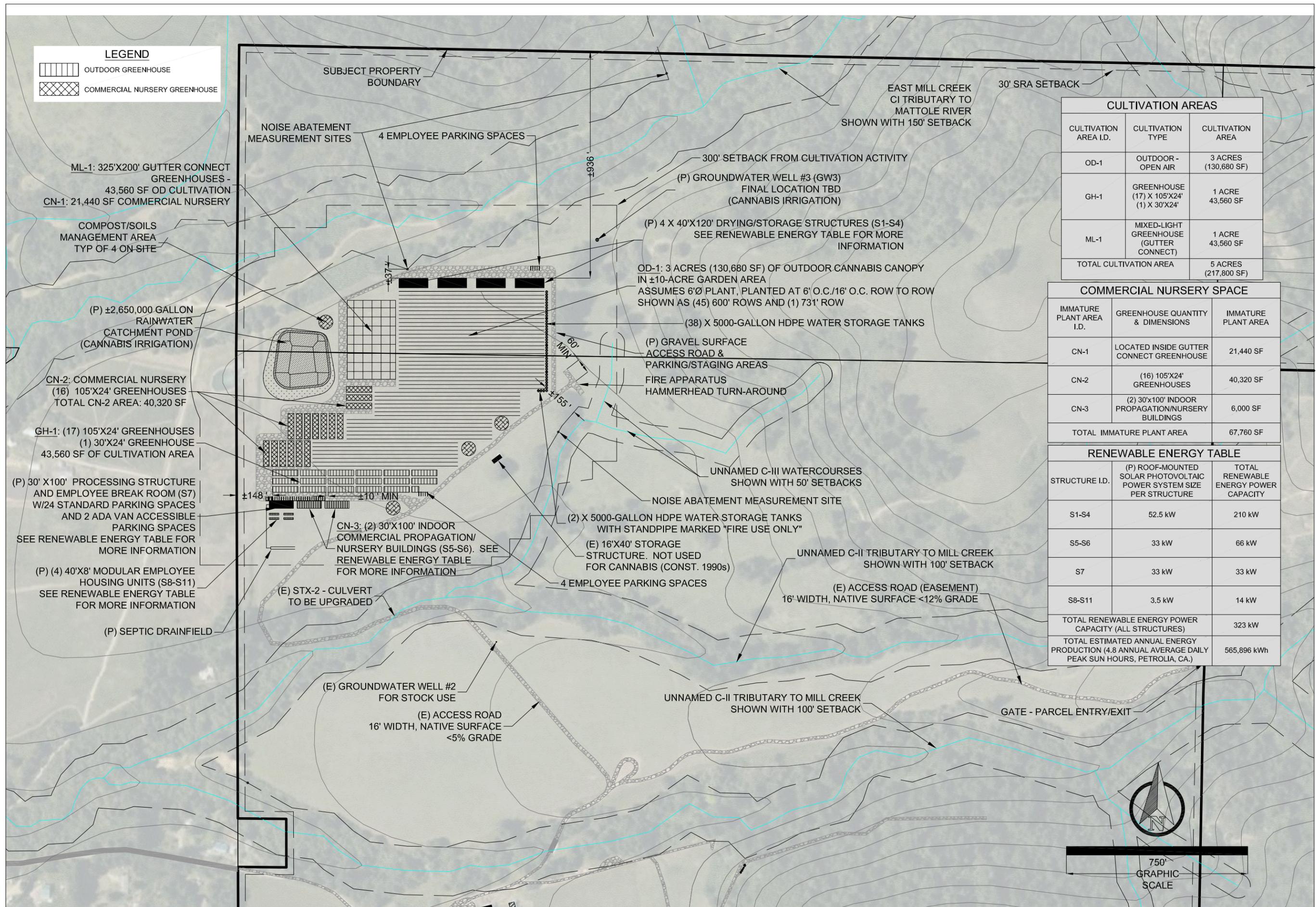
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NO.	HISTORY / REVISION	BY	CHK.	DATE

CISCO FARMS, INC.  
 MERGED PROPERTY APNs 105-101-011, 104-232-005 & 104-191-001  
 1414 CHAMBERS ROAD, PETROLIA, CA 95558

DRAWN	ACS
CHECK	GAC
APPROVED	ACS
DATE	12/9/2021
JOB NUMBER	CF-001
SHEET	C2

PARTIAL SITE PLAN



**LEGEND**

[Grid Pattern]	OUTDOOR GREENHOUSE
[Cross-hatch Pattern]	COMMERCIAL NURSERY GREENHOUSE

**CULTIVATION AREAS**

CULTIVATION AREA I.D.	CULTIVATION TYPE	CULTIVATION AREA
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<b>TOTAL CULTIVATION AREA</b>		<b>5 ACRES (217,800 SF)</b>

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<b>TOTAL IMMATURE PLANT AREA</b>		<b>67,760 SF</b>

**RENEWABLE ENERGY TABLE**

STRUCTURE I.D.	(P) ROOF-MOUNTED SOLAR PHOTOVOLTAIC POWER SYSTEM SIZE PER STRUCTURE	TOTAL RENEWABLE ENERGY POWER CAPACITY
S1-S4	52.5 kW	210 kW
S5-S6	33 kW	66 kW
S7	33 kW	33 kW
S8-S11	3.5 kW	14 kW
<b>TOTAL RENEWABLE ENERGY POWER CAPACITY (ALL STRUCTURES)</b>		<b>323 kW</b>
<b>TOTAL ESTIMATED ANNUAL ENERGY PRODUCTION (4.8 ANNUAL AVERAGE DAILY PEAK SUN HOURS, PETROLIA, CA.)</b>		<b>565,896 kWh</b>



## CISCO FARMS INC.

PLN-2021-17384 CUP

APNs 105-101-011, 104-232-005, 104-191-001

### PROJECT DESCRIPTION – UPDATED 12-08-21

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#### EXECUTIVE SUMMARY

Cisco Farms Inc. is seeking Conditional Use Permits for 5 acres of new open-air cannabis cultivation and commercial nursery, and Zoning Clearance Certificates for two (2) Cannabis Support Facilities: commercial processing and Community Propagation Center on APNs 105-101-011, 104-232-005, and 104-191-001. Of the 5 acres, 3 acres will be full-sun outdoor, 1 acre light-deprivation in greenhouses with no artificial light, and 1 acre mixed-light in gutter-connect greenhouses with supplemental lighting not to exceed 25 watts/sf. Cultivation will result in 1-3 cycles annually, depending on the method. Nursery facilities total 67,760 sf and include 40,320 sf of greenhouses, 21,440 sf of gutter-connect greenhouses, and 6,000 sf of indoor/enclosed space. The Project proposal includes permitting of proposed facilities and structures that are appurtenant to the cultivation activities, which includes 19,200 sf of drying facilities. Drying and processing will initially occur off-site then move to on-site once these facilities have been constructed. A 3,000-sf commercial processing building is also proposed for both cannabis produced on-site and that produced by other cultivators.

All irrigation water will be sourced from rainwater catchment. A groundwater well will provide water designated for human use and sanitization only. A total of 2,850,000 gallons of water storage is proposed. Water will be stored on-site in one agricultural pond with 2,650,000-gallon capacity, and forty (40) plastic tanks, each with 5,000-gallon capacity (total 200,000 tank capacity). Total annual irrigation water use is projected to be 2,154,095 (8.3 gal/sf cultivation, 5.1 gal/sf nursery). Groundwater well use for human use and sanitization will be 111,709 gallons. Power will come from PG&E service and onsite renewables (solar and/or wind). There will be a maximum number of 34 employees during peak operations, with 12 during all other times. Approximately 1,280 sf of farmworker/ employee housing is proposed in modular units that will accommodate up to 8 persons. Domestic water for the housing will be sourced from the well and an OWTS will be installed. Access to the site is from Chambers Road, a paved County-maintained road. In addition, a Transport-only Self Distribution license will be sought at the state level in order to satisfy operational logistics.

# 1. INTRODUCTION

## 1.1. PURPOSE AND SCOPE

Cisco Farms Inc. (the “Applicant”) submits this application requesting approval of Conditional Use Permits for new open-air commercial cannabis cultivation and wholesale nursery and Zoning Clearance Certificates for Cannabis Support Facility: commercial processing center, and Community Propagation Center (cumulatively the “Project”) in the County of Humboldt (“County”). This application has been prepared in accordance with Humboldt County’s Commercial Cannabis Land Use Ordinance (CCLUO), No. 2599 ( aka "Ordinance 2.0") and California Business and Professions Code § 26000 – 26250.

## 1.2. APPLICANT INFORMATION

Cisco Farms Inc.  
PO Box 1083  
Trinidad, CA 95570  
(707) 499-6252

Cisco Farms Inc. is a California general stock corporation with one director and shareholder, Karl Benemann. As the Director, Mr. Benemann may bind the corporation in all matters in the ordinary course of corporate business. Mr. Benemann will act as the Designated Responsible Party and/or Representative of the Applicant for the activities described in this application.

Cisco Farms Inc. is an “agricultural employer” as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 commencing with Section 1140) of Division 2 of the Labor Code. The above statement fulfills requirements of California BPC §26051.5(a)(8). Cisco Farms Inc. shall register with the California EDD as an agricultural employer upon receipt of permit and shall abide by all Federal and state laws to which such employers are subject (CCLUO §55.4.12.2.7).

## 1.3. APPLICANT’S AGENT

Kate Cenci  
Cenci Consulting  
PO Box 148  
Petrolia, CA 95558  
(707) 616-7207  
cenciconsulting@gmail.com

## 2. SITE DESCRIPTION

### 2.1. PROJECT LOCATION

#### 2.1.1. ADDRESS

1414 Chambers Road  
Petrolia, CA 95558

#### 2.1.2. APN

105-101-011  
104-232-005  
104-191-001

#### 2.1.3. VICINITY

The Project is located in the inland zone approximately 1.1 mile east of the community of Petrolia, as shown on Figure 1. Petrolia contains a general store, post office, elementary school, and a small number of rural residences. The nearest urban developments are Ferndale and Garberville, located approximately 20 miles north and 30 miles southeast, respectively, along Highway 101.

#### 2.1.4. WATERSHED

The property is entirely located within the *Cape Mendocino* Planning Watershed (USGS HUC-8 *Mattole*) and the *Lower Mattole River* USGS HUC-12 subwatershed, which is not listed as an “impacted” and/or “refuge” HUC-12 subwatershed In Humboldt County Board of Supervisors Resolution 18-43 (adopted 05/08/18).

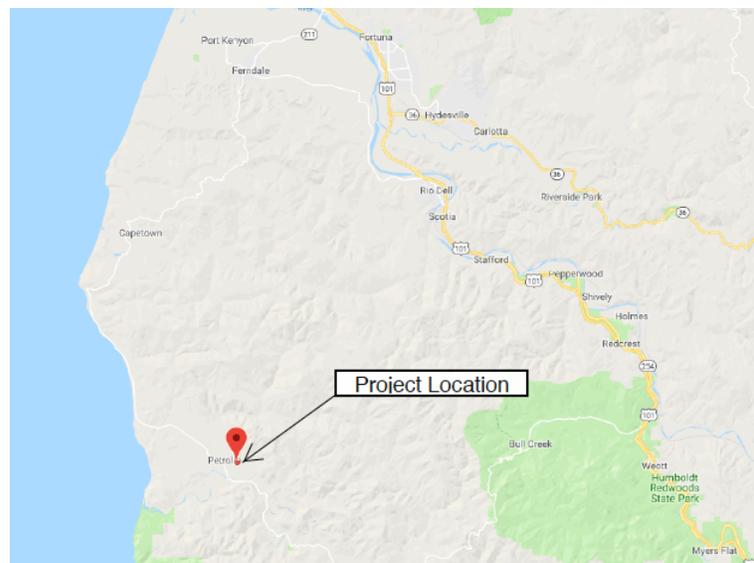


Figure 1. Vicinity Map

#### 2.1.5. SPECIAL AREA APPLICABILITY

The Project is not located within any of the special areas or sensitive receptors listed in CCLUO 2.0 §55.4.5.1.

#### 2.1.6. DIRECTIONS & ACCESS

From Ferndale, turn right on Bluff St/Ocean Ave at the south end of town, then shortly thereafter, turn left onto Wildcat Road heading towards Petrolia. Continue for approximately 30 miles until the town of Petrolia. Follow the main road (Front Street) through town and head right, onto Mattole Road. Continue for 0.2 miles then turn left onto Chambers Rd. After approximately 1.1 miles, Chambers Road ends at the property boundary of the Project site. A private driveway provides access from this point to the site. There is a locked gate near the beginning of the drive. The site is accessed by continuing through the gate and along the gravel drive, approximately 0.75 miles in a general northern direction, traversing two stream-crossings in the process. The Project site is located at the northern terminus of the access drive. A gravel drive shall surround all areas of cannabis activity, providing more site-specific access. Ample room for parking will be along the length of this drive, although specific required designated parking areas are proposed along the northern and southern portions.

### 2.2. PROPERTY DESCRIPTION

#### 2.2.1. OWNERSHIP

In 2020, ownership of the property transferred from a longtime landowner to Karl and Esther Benemann, husband and wife. The couple then formed a legal trust, The Karl Francis Benemann and Esther Dawn Benemann Family Revocable Trust (the “Trust”), to which the property was then subsequently transferred.

#### 2.2.2. SIZE

The Project site is situated on a property that comprises approximately 504 acres (County GIS), and thus is subject to eligibility requirements under CCLUO §55.4.6.1(c). The property is divided between three (3) APNs: 104-232-005 is 108.69 acres (GIS), 104-191-001 is 74.53 acres (GIS), and 105-101-011 is 320.7 acres (GIS). The APNs are part of a larger landholding known as the Walker Ranch or Walker Preserve. The Ranch is held in a Class B Agricultural Preserve (Land Conservation Contract / PLN-2020-16472, approved by Board of Supervisors on 09/29/2020) established under California Government Code § 51254 and the County’s Williamson Act Guidelines. Additionally, in July 2020, a Notice of Merger (NOM) and Lot Line Adjustment (LLA) application was submitted to the County Planning Department and subsequently approved in May 2021. While the NOM and LLA did not diminish the size of Walker Preserve, they re-assigned various parcels to compose three distinct tracts – A, B, and C – within the preserve. All cannabis activities are proposed to occur on Tract C, which is the property described herein. In particular, cannabis activities and infrastructure will occur on APNs 104-232-005 and 105-101-011.

### 2.2.3. GENERAL PLAN DESIGNATION & ZONING

The property has a Land Use Designation of Agricultural Grazing (AG) in the County’s General Plan, which “...applies to dry-land grazing areas in relatively small land holdings that support cattle ranching or other grazing supplemented by timber harvest activities that are part of the ranching operation, and other non-prime agricultural lands. Residential uses must support agricultural operation.”<sup>1</sup> The AG designation applies to all areas of the Project site where cannabis cultivation, nursery activities, processing, employee housing, and all other supporting activities will occur.

The property is zoned AE-B-5(160) for all parcels. According to the County’s Zoning Regulations (Humboldt County Code; HCC), the AE zone applies to “...fertile areas in which agriculture is and should be the desirable predominant use and in which the protection of this use from encroachment from incompatible uses is essential to the general welfare” (HCC §314-7.1).<sup>2</sup> Principal permitted uses in the AE zone include all general agricultural uses, including accessory agricultural uses and structures listed in HCC §314-43.1.3 and HCC §314-69.1.1, respectively. (The combined B-5 zoning allows for modification in regard to lot area and yard requirements in the principal zone (HCC §314-17.1)).

The Project site is not a timberland property that is subject to special additional restrictions under CCLUO 2.0. All cultivation shall be located within a non-forested area that was in existence prior to January 1, 2016, thus satisfying the requirements of §55.4.6.4.2. Please see *Historic Aerials: 105-101-011, 104-232-005 & 104-191-001* for confirmation.

### 2.2.4. LAND USE

#### 2.2.4.1. Property

Current uses include cattle grazing and residential activities. Under the County’s Williamson Act guidelines, “Lands under contract within an agricultural preserve shall be used for the producing of agricultural commodities for commercial purposes and uses compatible with agriculture. The majority of the land area of any property under contract must be devoted to agricultural pursuits consistent with the purpose of the preserve in which the property is located.”<sup>3</sup> The proposed cannabis Project – including all garden areas, infrastructure, water storage, and all spaces in between – will occur completely within an approximately 22-acre area of the ~1,043-acre preserve, or 2.1 %. The majority of the property and larger ranch will continue to be used for cattle grazing, which is consistent with the Land Conservation Contract terms and Williamson Act Guidelines.

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<sup>1</sup> <https://humboldt.gov/DocumentCenter/View/62021/Section-48-Land-Use-Designations-PDF?bidId=>

<sup>2</sup> <https://humboldt.gov/DocumentCenter/View/4029/Humboldt-County-Zoning-Regulations-PDF?bidId=>

<sup>3</sup> BOS Resolution No. 16-144. <https://humboldt.gov/DocumentCenter/View/57196/Agricultural-Preserve-Guidelines-?bidId=>

#### 2.2.4.1.1. Existing Structures – non-cannabis

Several existing structures and facilities are located on the property and will not be associated with cannabis cultivation or cannabis activities. Existing structures are for residential and cattle operation uses. They are as follows:

- Residence – approx. 1,900 sf
- Barn 1 – 1,320 sf
- Barn 2 – 1,600 sf
- Barn 3 – 1,320 sf
- Shop – 3,150 sf
- Storage structure – 640 sf
- Conex container – 320 sf
- Three (3) above-ground fuel tanks – 500 gal each
- Groundwater well 1 – stock
- Groundwater well 2 – stock
- Spring diversion – domestic
- One (1) 5,000-gal HDPE water tank – stock
- Two (2) 3,600-gal HDPE water tanks – stock
- Three (3) 1,000-gal concrete water tanks – domestic

#### 2.2.4.2. Surrounding Land Use

The property is located in an area of rural residential and agricultural uses that include livestock grazing, commercial cannabis cultivation, and small-scale vegetable and fruit farming. A Rural Community Center (RCC) designation for the town of Petrolia exists approximately 1 mile west of the property.

### 2.3. SETBACKS (§55.4.6.4.4)

All cultivation areas, nursery structures, processing building, and farmworker housing units meet the general requirements for property line setbacks (30 ft), setbacks from residences on neighboring parcels (300 ft), and undeveloped parcels (270 ft). Please see the accompanying Project Site Plan for details and locations. All Project features, including access roads and water storage infrastructure, are located greater than 30 ft from any parcel boundary and greater than 300 ft from any neighboring residences. The closest vacant parcel boundary to any cannabis-associated activity is located 936 ft to the north (APN 104-232-002). As the Project consists of various components, the following table (Table 1) has been assembled to assist in the review of various distances from Project activities to property lines and neighboring residences.

**Table 1. Distances (in feet) from Cannabis Activity Areas on APN 105-101-011 et al. to Property Boundaries and Neighboring Residences<sup>†</sup>**

CANNABIS ACTIVITY AREA*	CLOSEST PROPERTY LINE	NEIGHBORING RESIDENCE 1 (104-232-008)	NEIGHBORING RESIDENCE 2 (105-101-010)
OD-1	456	787	-
GH-1	148	720	-
ML-1	456	665	-
N1	456	665	-
N2	344	687	-
N3	360	-	793
CN-1	200	587	-
CN-2	248	-	738
Drying	456	880	-
Processing	136	-	766
Farmworker Housing	136	-	622

<sup>†</sup> Distances are provided for the nearest neighboring residence only

\* See Site Plan for activity identification description

Currently all mapped Streamside Management Areas (SMA) near the Project site are of sufficient width to encompass at least 100' and 50' from riparian drip edge or top of bank for all perennial and intermittent streams, respectively. The smallest distances from cannabis activities to the edge of various streams SMAs near the Project site are shown in Table 2. All of these distances meet County Code § 314-61.1 setback requirements for Perennial streams (100') and intermittent streams (50'). These distances also satisfy the setback requirements of State Water Resources Control Board (SWRCB) Order No. WQ 2019-0001-DWQ, which list 150' for perennial/Class I streams, 100' for Intermittent/Class II streams, and 50' for ephemeral/Class III watercourses.

**Table 2. Distances (in feet) from Cannabis Activities to Nearby Watercourse SMA Edges on APN 105-101-011 et al.**

WATERCOURSE	NEAREST CANNABIS ACTIVITY*	DISTANCE TO SMA EDGE (FT)	DISTANCE TO RIPARIAN DRIP EDGE / TOP OF BANK (FT)
East Mill Creek (Class I)	OD-1	87	237
	Drying Building	37	187
Un-named Class II	GH-1	333	433
Un-named Class III	OD-1	155	205

\* See Site Plan for activity identification description.

There are no Sensitive Receptors, such as schools, school bus stops currently in use, parks, churches or other places of religious worship, public parks, or Tribal Cultural Resources within 600 feet of the Project. There are no Tribal Ceremonial Sites within 1,000 feet of the Project.

#### 2.4. SITE TOPOGRAPHY (§55.4.6.4.1)

The Project site is generally level and disturbed from past agricultural activities, primarily intensive grazing of livestock. Slopes in the area to be developed for the proposed use are 2-3%. Please see the accompanying map, *105-101-011, 104-232-005 & 104-191-001 Slope Evidence* for confirmation.

#### 2.5. SOILS (§55.4.6.4.3)

The property contains “Prime Agricultural Soils”, “Prime farmland if irrigated” soils, and “Not prime farmland” soils.<sup>4</sup> Both “Prime Agricultural Soils” and “Prime farmland if irrigated” soils meet the definition of Class I soils, as defined by NRCS (previously SCC).<sup>5</sup> As such, this mapped soil type meets the definition of “Prime Agricultural Soils” (prime ag) listed in CCLUO 2.0.

Total Prime Agricultural Soils area on the property is approximately 120 acres. The Project will occur in an area that is predominantly “not prime farmland” soils, with only 0.96 acres of Prime Agricultural Soils found within the Project boundary (at the northwestern corner of the outdoor cultivation area and north of the gutter-connect greenhouses). This is approximately 0.8% of total Prime Agricultural Soils on the property, thus meeting the requirements of §55.4.6.4.3. Please see the accompanying *105-101-011, 104-232-005 & 104-191-001 Prime Ag Soils* map for details.

In regard to total land coverage, the Project will encompass an area of approximately 22 acres. This area includes outdoor cultivation, greenhouse cultivation, nursery greenhouses, all buildings, employee housing, staging areas, parking, driveways, water storage, and all spaces in-between. This is 4.4% of the total property acreage.

#### 2.6. WATER SOURCE (§55.4.6.3.2)

The Project will source all irrigation water from rainwater catchment. Water will be stored in a pond and enclosed tanks. The pond has been designed with a capacity to collect adequate rainfall to meet irrigation demand (see *Cultivation & Operations Plan*). The pond design allows

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<sup>4</sup> Mapped and calculated using Humboldt County ArcGIS, *Prime Agricultural Soils* and *NRCS 2014 Soils (Proposed)*

<sup>5</sup> [https://www.nrcs.usda.gov/wps/portal/nrcs/detail/null/?cid=nrcs143\\_014052](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/null/?cid=nrcs143_014052),  
[https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf),  
[https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/?cid=nrcs143\\_014040](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/?cid=nrcs143_014040)

for overflow into a rock spillway and drainage in the event of occupation by non-native species. The pond shall contain at least two (2) wildlife ladders to facilitate animal escapement.

Non-irrigation water – for drinking, sanitization, and employee residence use – will be sourced from a proposed groundwater well (GW3 on Site Plan, exact location TBD).

## 2.7. ENERGY SOURCE (§55.4.6.3.1)

Electricity for the Project and ancillary activities will be provided by grid power, with the exception of greenhouse fans, which may be grid or solar powered. Grid power use may be offset in future years through the installation of a permitted solar array. Please see the *Cultivation & Operations Plan* for further details of how the Project will meet the Performance Standard for Energy Use.

## 2.8. ROAD SYSTEMS (§55.4.6.3.3)

Access to the Project site is via a private driveway from Chambers Road, which is a paved county-maintained road developed to the Category 4 Standard (please see the *DPW Road Evaluation Report*). The driveway to the Project site is approximately 0.75 miles in length and contains two (2) stream-crossings – a bridge and a culvert. The culvert will be updated to meet 100-year streamflow event requirements, following all applicable California Department of Fish and Wildlife (CDFW), SWRCB, and County guidelines. An additional culvert on a road not related to cannabis activities will also be replaced, following all applicable state and local guidelines. A “standard” Lake and Streambed Alteration Agreement (LSAA) application was submitted to CDFW in May 2021 (Application ID 18009) for the culvert replacements and general cannabis activities. Please see *LSAA Application Submission Confirmation Page* for reference. The section entitled *Road Systems* in the accompanying *Cultivation & Operations Plan* contains further details of how the Project meets Performance Standards for road systems pertaining to cannabis operations.

## 2.9. BIOLOGICAL RESOURCES & ASSESSMENT

An initial biological assessment was performed in July 2020 in accordance with CCLUO §55.4.12.1.10. The Project was again evaluated in summer and fall 2021, and the report updated to reflect changes and updates to the Project and include additional flora and fauna surveys that were undertaken since the initial assessment was completed (please see the accompanying *Biological Reconnaissance and Project Feasibility Assessment Report* dated 09/09/2021; the “Report” in this section). The Report noted that the Project area had a history of prolonged and current disturbance due to intensive cattle grazing, and concluded that the Project would likely result in no direct impacts to sensitive habitats and would not severely alter the already-disturbed habitat quality of the site. Likewise, no potential indirect impacts to the environment,

surrounding habitat, or wildlife were foreseen if the Applicant follows BMPs outlined in the Report, CCLUO 2.0, and other agency guidelines. By following such BMPs, any environmental effects can be mitigated and a “neutral or negative impact” can be achieved.

Recommended BMPs include, but are not limited to, the following:

- Maintaining all appropriate riparian buffers
- Implementing BMPs to prevent sediment, fuels, or contaminants from entering the surrounding terrestrial environment
- Replacing any undersized culverts at relevant stream crossings
- Monitoring for and controlling invasive species according to the Project-specific *Invasive Species Control Plan*, particularly during site development
- Limiting noise-producing construction activities to September 1 – January 31 to avoid disturbance to migratory nesting birds, and/or conduct nesting bird surveys prior to construction activities if they fall outside of this timeframe

The Report also listed that most sensitive species or listed special-status plant species had a “low” or “none” potential of occurrence, with a few exceptions. The golden eagle and Cooper’s hawk both had a “moderate” potential of occurrence in the Project area and nearby vicinity. As such, a focused raptor survey set was recommended. The initial survey was conducted in September 2021 with a follow-up survey scheduled for February 2022. The nearest Spotted Owl activity center was approximately 2 air-miles from the Project site (as shown on map in the Report).

The only sensitive faunal species with *evidence* of presence in the Project area is the American badger. The Report recommends that pre-construction surveys should be completed by a qualified biologist, before site development occurs. If the survey/s finds active dens within the Project site badger relocation (by a qualified professional) should occur to other onsite suitable habitat.

Protocol-level floristic surveys were performed on two separate occasions in March and June 2021 in order to capture the potential seasonal presence of special status plant species. No special status communities or habitats were observed during these surveys and the only sensitive species observed was a Monterey cypress (*Hesperocyparis macrocarpa*) adjacent to the Project area. This tree is believed to be a planted ornamental and should not be affected by Project activities.

## 2.10. ARCHEOLOGICAL & HISTORICAL RESOURCES

A cultural resources survey and assessment of the property was performed in 2020. No artifacts, features, or sites which would be considered an historical resource for the purposes of CEQA

were identified during the field survey or found during the background investigation associated with the assessment. Additionally, no tribal cultural resources (PRC §21074) were found or appear to be present within the Project area, nor are they suspected within 600 feet of the Project site. Please see the associated *Cultural Resources Report* for the property. Notwithstanding the above, if in the course of site development activities or normal site operations archaeological and paleontological resources are discovered, all activities shall comply with CCLUO §55.4.12.1.15 and SWRCB Order No. WQ 2019-0001-DWQ Attachment A, §1.22 and §1.23.

## 2.11. HAZARDOUS MATERIALS

A site record search of the EnviroStor database was conducted for the property. This was done to satisfy requirements of CCR Title 3, Div. 8, Chpt. 1, §8102 and CCLUO §55.4.12.1.11. No hazardous materials have been documented at the site or within a 5,000 ft radius. Please see *EnviroStor\_105-101-011*.

## 3. DESCRIPTION OF FACILITIES & ACTIVITIES

### 3.1. CULTIVATION

#### 3.1.1. GARDEN AREAS

Cultivation will occur in open-air gardens totaling 217,800 sf (5 ac). All cultivation will occur with drip irrigation in amended native soil or in pots in native and/or imported soil, depending on cultivation method. The Project proposes one large outdoor full-sun garden plot, one area of stand-alone greenhouses, and one area of gutter-connect greenhouses. Canopy/cultivation area calculations are based on the footprint of each greenhouse, where applicable. The Applicant intends to permit all greenhouse structures as “Ag-exempt” under HCC. Greenhouses will be equipped with air ventilation systems and automatic blackout tarp systems. Details of each area are described below, with a corresponding ID for Site Plan reference.

##### 3.1.1.1. Full-sun outdoor (OD-1)

130,680 sf (3 ac) in ± 10 acre garden area. Plants are 6 ft on center apart with 16 ft on center between rows. Layout is approximately 45 rows at 600 ft and 1-2 additional rows totaling 731 ft.

##### 3.1.1.2. Light-deprivation greenhouses (GH-1)

43,560 sf (1 ac) of stand-alone greenhouses. Seventeen (17) greenhouses measuring 105' X 24' and one (1) greenhouse measuring 30' X 24'. Cultivation will use light-deprivation techniques without the use of artificial light in the canopy area.

### 3.1.1.3. Mixed-light gutter-connect greenhouses (ML-1)

43,560 sf (1 ac) rigid plastic greenhouses that share rooflines. Dimensions are 217.8' X 200' (total gutter-connect greenhouse area is 325' X 200' with non-cultivation space reserved for nursery activities; see below). The floor of the greenhouse assembly will be gravel with radiant heating installed.

### 3.1.2. ON-SITE CULTIVATION SUPPORT ACTIVITIES

#### 3.1.2.1. Drying

16,000 sf drying and storage. Four (4) buildings, each measuring 40' X 100' (4,000 sf). Buildings are proposed as steel buildings with concrete slabs. The buildings will be installed with temperature controls (heating, cooling, dehumidifying) in order to properly cure cannabis, but which are not intended for human occupancy. The Applicant intends to permit all drying and storage structures as "Ag-exempt", and will provide a current Title 24 Building Energy Requirement for Plant Processing exemption letter from a Qualified Energy Consultant.

#### 3.1.2.2. Processing & Packaging

One (1) 3,000 sf indoor processing facility with building dimensions 100' X 30'. The building will be permitted commercial and is proposed as a steel building with concrete slab. (Space is also shared with commercial processing activities, see below.)

## 3.2. CANNABIS SUPPORT FACILITY – OFF-SITE PROCESSING CENTER

One (1) 3,000 sf indoor commercial processing facility will process cannabis from other local farms and licensees, as well as cannabis produced on-site. The facility will include spaces for trimming, packaging, and employee break and restroom areas. The facility will be equipped to meet all applicable local and state building codes and guidelines for commercial buildings, including ADA requirements. Total dimensions are 100' X 30' with a breakdown of areas by activity listed below. All given areas are approximate. Please see *Cisco Farms Processing Building Detail* for basic draft floor plan.

- Processing and packaging activities, 2,100 sf
- Employee kitchen and breakroom, 300 sf
- ADA-compliant restroom with shower, 80 sf
- Secondary restroom, 40 sf
- Office, 80 sf
- Storage areas, 80 sf

### 3.3. CANNABIS SUPPORT FACILITY – NURSERY & COMMUNITY PROPAGATION CENTER

This will be operated as a state-licenses commercial nursery facility. The purpose of this facility is two-fold: 1) focus on the production of clones and immature plants for commercial wholesale and/or transfer to distributors and cultivators, and 2) create space for other local cultivators to house mother plants, clones, and immature plants. In totality, this nursery facility is referred to as the “commercial nursery” on the Site Plan and is divided into two main areas. Details of each area are described below, with corresponding ID for Site Plan reference.

#### 3.3.1. GREENHOUSES (CN-1)

40,320 sf space in sixteen (16) greenhouses. Dimensions of each greenhouse are 105’ X 24’.

#### 3.3.2. INDOOR (CN-2)

6,000 sf indoor space in two (2) buildings, each measuring 100’ x 30’.

#### 3.3.3. GUTTER-CONNECT GREENHOUSES (N-3)

Additional 21,440 sf of nursery space in gutter-connect greenhouses. Dimensions are 107.2’ X 200’ (total gutter-connect area is 325’ X 200’; other space is occupied by mixed-light cultivation). This Project aspect is proposed for 2026 and beyond and will only occur if adequate grid or on-site renewable energy is sufficient for this Project component.

### 3.4. TRANSPORT-ONLY SELF DISTRIBUTION

The Applicant intends to obtain licensure from the state for Transport-Only Self Distribution. The only physical space required for such activity is a records storage area, which will occur in the small office in the processing building. This Project aspect is included so that it may be included in the CEQA analysis and review of the entire Project.

## 4. RELATED PROJECTS/APPLICATIONS

The proposed Project contains elements that may involve other current or proposed cannabis cultivation projects under the responsibility of the Applicant’s designated representative (Karl Benemann). The other projects are located within 1 air-mile of the proposed Project. Shared elements include nursery and processing activities. The Applicant may produce plants at the Project site destined to be grown at the other farm sites and/or may process at the Project site cannabis grown at the other farm sites. Likewise, the other sites may provide plants or processing services for the proposed Project during the period it takes for the site to become fully operational following permit approval. The other nearby farm sites are briefly described below.

#### 4.1. CUP-16-125 ON APN 105-111-016

22,000 sf light-dep outdoor cultivation, 1,841 sf mixed-light cultivation, and 4,067 sf full-sun outdoor cultivation – approved October 2018. Minor deviation PLN-2020-16686 was approved March 2021.

#### 4.2. PLN-2021-17034 ON 105-111-001 ET AL.

Proposed project for 43,560 sf mixed-light cultivation, 5,000 sf indoor cultivation, enclosed (wholesale) nursery, commercial processing, and distribution – application submitted February 2021.

**CISCO FARMS INC.**

PLN-2021-17384 CUP

APNs 105-101-011, 104-232-005, 104-191-001

**CULTIVATION & OPERATIONS PLAN – UPDATED 12-08-21**

---

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# 1. INTRODUCTION

## 1.1. PURPOSE

This Cultivation and Operations Plan is intended for Cisco Farms Inc. (the “Applicant”) on APNs 105-101-011, 104-232-005, and 104-191-001 (the “Property”; one legal lot as defined by Humboldt County Code (HCC)). It is structured to address Performance Standards set forth in Humboldt County’s Commercial Cannabis Land Use Ordinance (CCLUO), No. 2599 ( aka "Ordinance 2.0") §55.4.12, as well as other requirements set for the by the County Planning Department). The specific Performance Standard that is addressed by each section is listed in the section title.

## 1.2. EXECUTIVE SUMMARY

Cisco Farms Inc. is seeking Conditional Use Permits for 5 acres of new open-air cannabis cultivation and commercial nursery, and Zoning Clearance Certificates for two (2) Cannabis Support Facilities: commercial processing and Community Propagation Center on APNs 105-101-011, 104-232-005, and 104-191-001. Of the 5 acres, 3 acres will be full-sun outdoor, 1 acre light-deprivation in greenhouses with no artificial light, and 1 acre mixed-light in gutter-connect greenhouses with supplemental lighting not to exceed 25 watts/sf. Cultivation will result in 1-3 cycles annually, depending on the method. Nursery facilities total 67,760 sf and include 40,320 sf of greenhouses, 21,440 sf of gutter-connect greenhouses, and 6,000 sf of indoor/enclosed space. The Project proposal includes permitting of proposed facilities and structures that are appurtenant to the cultivation activities, which includes 19,200 sf of drying facilities. Drying and processing will initially occur off-site then move to on-site once these facilities have been constructed. A 3,000-sf commercial processing building is also proposed for both cannabis produced on-site and that produced by other cultivators.

All irrigation water will be sourced from rainwater catchment. A groundwater well will provide water designated for human use and sanitization only. A total of 2,850,000 gallons of water storage is proposed. Water will be stored on-site in one agricultural pond with 2,650,000-gallon capacity, and forty (40) plastic tanks, each with 5,000-gallon capacity (total 200,000 tank capacity). Total annual irrigation water use is projected to be 2,154,095 (8.3 gal/sf cultivation, 5.1 gal/sf nursery. Groundwater well use for human use and sanitization will be 111,709 gallons. Power will come from PG&E service and onsite renewables (solar and/or wind). There will be a maximum number of 34 employees during peak operations, with 12 during all other times. Approximately 1,280 sf of farmworker/ employee housing is proposed in modular units that will accommodate up to 8 persons. Domestic water for the housing will be sourced from the well and an OWTS will be installed. Access to the site is from Chambers Road, a paved County-maintained road. In addition, a Transport-only Self Distribution license will be sought at the state level in order to satisfy operational logistics.

### 1.3. COMPLIANCE & INSPECTIONS (§55.4.12.1.1-7, §55.4.12.2.1-4,7)

The Applicant will comply with all environmental protections and standards, performance standards, and associated reporting, payment of fees, inspections, and licenses in conjunction with the following regulations and/or agencies, as applicable:

- Humboldt County CCLUO 2.0
- Humboldt County Planning & Building Department (the “Department”)
- California Department of Food and Agriculture (CDFA; CCR Title 3, Div.8, Cpt.1 §8000-8607)
- Bureau of Cannabis Control (BCC)
- California Department of Public Health (CDPH)
- California Department of Cannabis Control (July 2021 and thereafter)
- State Water Resources Control Board (SWRCB; Order No. 2019-0001-DWQ)
- California Department of Fish & Wildlife (CDFW; CCR Title 14 § 722, Standard LSAA for Cannabis Cultivation & Non-cannabis, App. ID: EPIMS-18009)
- California Department of Pesticide Regulation (CDPR)
- California Department of Tax and Fee Administration (CDTFA)
- Humboldt County Treasurer-Tax Collector
- Humboldt County Agricultural Commissioner
- California Department of Industrial Relations, Cal-OSHA, US Department of Labor, and any other employment regulations and agencies

The Applicant consents to inspections and terms thereof outlined in CCLUO 2.0 as well as other inspections as described in various documents put forth by the agencies listed above.

The Applicant will register as an “agricultural employer” with the California EDD upon imminent receipt of County permit/s.

### 1.4. RELATED OPERATIONS

The chief officer of Cisco Farms Inc. also holds this position within several other cannabis operations. Of highest interest to this application are current and proposed operations on neighboring and/or nearby parcels in the Petrolia area on APN 105-111-016 (CUP-16-125) and 105-111-001 (PLN-2021-17034). For this Project, the Applicant intends to pursue permitting at the state level which will allow transfer of clones and juvenile plants from on-site nursery operations to the other sites, as well as receiving harvested cannabis for drying and trimming from the other sites. Similarly, during the initial years of this Project while the facility is being constructed, the Applicant may send harvested cannabis to the other sites – where state permitting allows – for drying and trimming.

## 2. SITE INFORMATION

### 2.1. SITE HISTORY

The Property is part of a larger historic cattle ranch consisting of several large parcels. An application for a Notice of Merger (NOM) was submitted to Humboldt County Planning Department in July 2020 and approved in early June 2021 (PLN-2020-16522). The NOM reorganized several parcels within the ranch to form two new tracts in order to meet zoning requirements for minimum parcel size, and to meet specific CCLUO 2.0 §55.4.6.1(c) eligibility for cannabis operations.

The ranch is held in a Williamson Act Land Conservation contract (Ranch ID 236) between the County and the Benemann Family Revocable Trust (please see additional document). Cannabis operations will not affect the contract terms and stock operations will continue on in the same capacity and manner as previous years, including on the parcels centric to cannabis operations.

### 2.2. SITE CHARACTERISTICS

The Project site consists of a flat agricultural field predominated by native and non-native pasture grasses. The site is immediately bordered to the north and south by narrow riparian bands of trees occurring along Class I and II streams, respectively. More extensive woodlands occur approximately 0.15 miles and 0.5 miles to the northeast and east, respectively. Climate at the site is dominated by coastal and geographic influences, with year-round strong winds. Due to this weather feature, the Applicant intends to erect wind fencing and/or plant windrows where necessary around the Project site.

### 2.3. ROAD SYSTEMS (§55.4.12.1.8)

#### 2.3.1. ACCESS ROADS & DRIVEWAYS

A private driveway provides access to the Project site from Chambers Road, which is a paved county-maintained road developed to the Category 4 Standard up to the edge of the Property boundary. Please see the *DPW Road Evaluation Report* prepared by a licensed engineer included in the application package. The driveway only provides access to the Property and one other neighboring parcel. The length of the driveway to the project site is approximately 0.75 miles. A gravel-surface access road will surround the entirety of the Project site (except for pond), contributing an additional length of ~0.75 miles.

Chambers Road and the private driveway will see routine use during project operations. Traffic will moderately increase above “routine use” along Chambers Road and the private driveway during the initial phase of the Project, when construction and site preparation activities are taking place. Traffic will also increase year-round from current levels as a result of additional employees traveling to and from the site, and other cultivators traveling to and from the

Community Propagation Center. Peak use time is estimated to be between 6:00 – 8:00 AM and 5:00 – 6:00 PM. Traffic shall observe a 10 mph maximum speed limit on the private drive and 25 mph maximum speed limit on Chambers Road.

The Applicant shall maintain the intersection of the driveway and Chambers Road in accordance with the requirements of HCC. These include ensuring all fences and gates are not located within the County right-of-way and will not impede traffic when being open and closed. The visibility triangle will be maintained in accordance with HCC §341-1. No construction or new buildings are proposed within the visibility triangle. If any fencing is installed, it shall be of a nature and type that does not obstruct vision, and all brush and vegetation shall be kept mowed at this intersection. The Applicant shall pave the driveway apron for a minimum width of 18 ft and length of 50 ft to meet current County standards for a commercial driveway.

The driveway surface beyond the paved apron and will be maintained so as to minimize dust during the season of use, in accordance with SWRCB Order WQ 2019-0001-DWQ.

2.3.2. STREAM-CROSSINGS

Three (3) stream-crossings exist on the Property, two of which are along the access driveway, both over Class II watercourses. The southernmost of these crossings is a bridge that was replaced as part of a state-funded fisheries restoration project in 2008; it is functioning with no evidence of erosion. The second crossing is a culvert that is currently functioning but needs to be replaced with a larger-sized culvert in order to meet the capacity for a 100-year streamflow event.

The third stream-crossing is located near the residential portion of the Property on the southern parcel, and is used for ranching activities and general property access. The crossing contains a functioning culvert that is undersized. The culvert will be upgraded to a larger size that will meet 100-year streamflow event capacity.

The crossing assessments and upgrade designs were completed by a qualified licensed engineer in accordance with CDFW guidelines and requirements. A standard Lake and Streambed Alteration Agreement (LSAA) application that includes the crossing upgrades, as well as general cannabis activities, was submitted to CDFW in May 2021 and is pending approval (Application ID: EPIMS-18009). The proposed stream-crossing upgrades shall only occur on in-use roads. All disturbances associated with this aspect of the Project will be limited to the road, stream channel, and banks immediately adjacent to the individual crossings for the purposes of storm-proofing and upgrading the crossings. Work will only occur during the period of June 15th through October 31st (or first significant rainfall) to limit and avoid impacts to aquatic habitat and salmonids. Vegetation will only be removed from sites where it is necessary for the implementation of effective storm-proofing treatments, where erosion is likely to occur, or where it is growing on anthropogenically placed fill material. All crossing sites where upgrades are proposed dry up in the later summer months such that water is not expected to be present

within the channel during the working period required for the culvert replacement, so dewatering will not be necessary. All stream-crossings will be monitored and maintained for debris as part of winterization procedures prior to November 15, and regularly thereafter prior to and just after large storm events, or every 2 weeks, whichever is more frequent.

In addition to the upgrades listed above, several minor driveway upgrades, such as rolling dips and additional ditch relief culverts, will be done to hydrologically disconnect road reaches from watercourse crossings and alignments, thereby further reducing anthropogenic impacts and sediment delivery potential to the Mattole River watershed from the rural road network on the Property.

### 2.3.3. PARKING PLAN & FIRE-APPARATUS TURN-AROUND

A total of seventeen (17) designated parking spaces in a perpendicular fashion will be located in three main locations around the Project site. Eight (8) spaces and one (1) ADA-compliant van-accessible space will be located adjacent to the processing building at the southwestern corner of the site. Four (4) spaces are proposed in the northeastern corner of the site, and four (4) in the southeastern corner. The gravel access road will also provide additional opportunities for parking along its length in a parallel fashion. Parking is based on all activities being conducted by a maximum of 14 employees during peak times. If additional employees are hired in the future, the parking area will be enlarged to accommodate more vehicles, if applicable, subject the requirements of HCC §313-109.1. Parking spaces shall be without cover with the area of each parking space 9 ft x 18 ft, and each ADA space 14' X 18' to meet both CCR and HCC requirements.

The turn-around area is a hammerhead/T configuration and is located off a spur from the southeastern corner of the access road. The turn-around area is at least 60 ft in length and as wide as the driveway – which will be approximately 12 ft – in order to meet CalFIRE SRA requirements.

The parking and turn-around areas shall be maintained so as to minimize dust during the season of use, in accordance with SWRCB Order WQ 2019-0001-DWQ.

## 3. ENVIRONMENTAL STANDARDS

### 3.1. STORMWATER MANAGEMENT PLAN – SITE DRAINAGE, RUNOFF, & EROSION CONTROL MEASURES (§55.4.12.1.12)

#### 3.1.1. SITE DRAINAGE & RUNOFF

The Project site consists of a flat agricultural field predominated by native and non-native pasture grasses. The Project site is immediately bordered to the north by a Class I stream, East Mill Creek, a tributary to the Mattole River. The site is bordered to the south and southeast by

un-named Class II and Class III drainages that are themselves tributaries to East Mill Creek. These creeks facilitate overall property drainage during the wet season. The Project will not divert water from any watercourses, and will not require any grading work to facilitate drainage. All cultivation will occur in the proposed open-air cultivation areas on relatively level ground with drip irrigation systems. All cannabis activity areas are located at least 150, 100, and 50 feet from the Class I, Class II, and Class III tributaries, respectively.

The slope of the cultivation site is approximately 2.7% both east-west and north-south. Surface water is naturally absorbed and recharged back into the existing landscape without channelization. The Project will not result in discharges that could affect surface water or groundwater quality. Irrigation water will be applied at agronomic rates via timed drip irrigation so as to minimize runoff. Any detected leaks in the irrigation system/s shall be fixed immediately so as to reduce runoff from such incidents.

Pond overflow will be constructed consistent with engineering professional standards and relevant local and state guidelines. The overflow consists of an armored (rocked) channel that empties at the natural grade and dissipates water back into the existing landscape. The pond was designed by a qualified licensed engineer, in accordance with HCC and SWRCB regulations.

All water storage features shall have emergency shut-off valves (timed or manual), and/or have float valves installed where appropriate, in order to reduce run-off from such features in the event of a leak or human error.

All runoff from soil and garden wastes shall be minimized by storing such wastes on low-gradient slopes in distinct compost bins and/or areas. Straw and/or straw baffles shall surround compost bins, areas, and piles, as may be deemed necessary. Drainage and potential runoff associated with fertilizer, amendment, and fuel storage shall be minimized through the use of secondary containment systems within proper covered off-the-ground storage.

With regard to access roads, the culvert replacements and driveway upgrades mentioned previously will further minimize runoff and sediment delivery potential to the watercourses on the Property. All drainage features and potential sources of runoff shall be inspected on a weekly basis during the wet season and after all significant storm events.

The Applicant has enrolled in SWRCB Order No. 2019-0001-DWQ and a Site Management Plan (SMP) is being developed in accordance with the General Order and Cannabis Cultivation Policy. The SMP includes erosion and sediment control Best Practicable Treatment or Controls (BPTCs) designed to prevent, contain, and reduce sources of sediment.

### 3.1.2. EROSION CONTROL MEASURES

Topsoil preservation measures include planting cover crop (clover and other species) during the fallow season, minimal tilling on calm days during garden preparation and planting, and mulching

or utilizing weed mats where appropriate. For minimizing erosion relating to roads and driveways, road conditions shall be inspected on a weekly basis during the year, and after major storm events during the wet season. Any road improvements shall utilize angular rock, outsloping, rolling dips, and water bars, as appropriate.

At all areas where excavation of soils, ground disturbance, grading, or spoil piles are proposed, best practicable treatments and controls (BPTCs) will be utilized immediately following such activities to ensure such features do not deliver sediment to surface waters. BPTCs include the use of erosion control seed, straw wattles, tarps and mulching with weed free straw. Application rates for erosion control native seed mix and mulch/straw/hay will be no less than 50 lbs/acre and 4,000 lbs/acre, respectively.

## 3.2. WATER SOURCE, STORAGE & USE

### 3.2.1 WATER SOURCE

All water for irrigation will be sourced from rain catchment, and thus, is not subject to the SWRCB Department of Water Rights Cannabis SIUR Program guidelines and restrictions. Trucked water may only be used for emergency situations, as defined by CCLUO §55.4.12.2.5.

#### 3.2.1.1. Rainwater Harvest

The Project has the potential to source all cannabis irrigation water needs from rainwater harvest. Three precipitation data sources were used to assess this aspect of Project feasibility. Using several sources was done to best reflect Project site conditions in elevation and geography in order to obtain the most accurate rainfall data for average and drought years. Table 1 shows the Project's catchment surfaces and their respective footprints with the corresponding individual and combined collection potentials for an average year and the driest years by data source. The various data sources are described as follows.

#### PRISM Climate Data<sup>1</sup>

PRISM data sets are the most widely used spatial climate data sets in the United States and are the official spatial climate data sets of the USDA. PRISM provides 30-year average monthly and annual precipitation (1981-2010 is the most recent 30-year dataset currently available on PRISM). As elevation is the most important factor in the distribution of climate variables, the 800-meter resolution was used to match the Project elevation as closely as possible; PRISM data are for 259 ft elevation and the elevation at the center of the Project site is approximately 295 ft. PRISM data were used to determine monthly and annual averages. To determine the driest year, PRISM time series data were used (which uses an elevation of 928 ft). The driest year was 2013 with 29.33 inches of precipitation.

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<sup>1</sup> <https://prism.oregonstate.edu/explorer/>

### Mattole NCWAP<sup>2</sup>

Appendix C of the North Coast Watershed Assessment Program (NCWAP): Mattole River Watershed Assessment Report provides Department of Water Resources data that is from a weather station that was in operation from 1958 – February 1995. It was at an elevation of 175 ft and distance of 1.25 airmiles from the Project site. Only annual data are available from this source. The driest year on record from this station was 1977 with 27.24 inches of rainfall; this is the lowest precipitation amount found from all the available data sources.

### CoCoRaHS Petrolia Station Data<sup>3</sup>

CoCoRaHS is an acronym for the Community Collaborative Rain, Hail and Snow Network. A station is currently located approximately 1.1 airmiles from the Project site at an elevation of 92 ft. The station has been in continuous operation since September 1, 2016. As both monthly and annual data are provided, the 2020 dataset was used in analysis as this year was a notable recent dry year.

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<sup>2</sup> Downie, Scott T., C.W. Davenport, E. Dudik, F. Yee, and J. Clements (multi-disciplinary team leads). 2002. Mattole River Watershed Assessment Report. North Coast Watershed Assessment Program, p. 441 plus Appendices. California Resources Agency, and California Environmental Protection Agency, Sacramento, California.

<sup>3</sup> <https://wys.cocorahs.org/>

Table 1. Rain-catchment Surfaces and Water Collection Potential (in Gallons) for Average and Dry Years for CISCO FARMS INC. on APN 105-101-011 et al.

Rain-catchment Facility	Catchment Surface Material	Footprint (sf)	PRISM 30-Yr Average (73.93 in)	PRISM Record Low (2013: 29.33 in)	CoCoRaHS Record Low (2020: 35.4 in)	NCWAP Record Low (1977: 27.24 in)
Pond	EPDM, polyethylene	46,367	2,136,878	847,756	1,023,204	787,347
Gutter-connect Greenhouses	acrylite, acrylic, polycarbonate	65,000	2,995,607	1,188,437	1,434,390	1,103,751
Stand-alone Greenhouses	polyethylene	43,560	2,007,518	796,436	961,262	739,683
Drying Buildings	galvanized steel, Galvalume	19,200	884,856	351,046	423,697	326,031
Nursery & Processing Buildings	galvanized steel, Galvalume	6,000	276,518	109,702	132,405	101,885
<b>TOTAL COLLECTION POTENTIAL (GAL)</b>			<b>8,301,376</b>	<b>3,293,377</b>	<b>3,974,959</b>	<b>3,058,697</b>

Collection capacity was determined using the following equation:

$$\text{Rainwater collected (gal)} = \text{catchment surface area (ft}^2\text{)} \times \text{Rain (in)} \times \text{Conversion factor}$$

Where the *Conversion factor* is:  $0.623377 = \left(\frac{1 \text{ in}}{12 \frac{\text{in}}{\text{ft}}}\right) \times \left(\frac{7.48052 \text{ gal}}{1 \text{ ft}^3}\right)$

The total amount of water required for cannabis irrigation plus pond evaporation is 2,832,025 gallons. If all catchment surfaces are employed, only 25.22 inches of rain is required to meet this amount, and the average annual rainfall of 73.93 inches is more than enough. Even in the driest years on record – NCWAP 1977, PRISM 2013, CoCoRaHS 2020 – enough precipitation will be received to meet Project demand.

One can see that in a drought year, all the listed catchment surfaces will be utilized in order to meet water needs, while in an average or particularly wet year, only the pond and the drying buildings may need to be used for catchment. Once storage facilities are at capacity, various catchment surfaces may be disconnected in order to avoid excess pond overflow. The Applicant will monitor water storage levels throughout the wet season to make such determinations in a timely manner.

#### 3.2.1.2. Groundwater Well

Non-irrigation water is proposed to be sourced from an on-site well. Non-irrigation water totals 111,709 gallons and is designated for the following purposes: drinking, restroom and shower facilities, processing (e.g. handwashing, surface and tool cleaning), and farmworker/employee residence use. It is necessary to source such water from a well, as issues are present around the legality and safety of using stored rainwater for human consumption and sanitization. The well will be used and operated in compliance with any local and/or state regulations and/or restrictions in place at the time of use.

#### 3.2.1.3. Imported Drinking Water

Drinking water for employees and resident farmworkers may be imported (i.e. bottled water) if requirements in effect in the future prevent the well from being utilized as a source for such water.

#### 3.2.2. WATER STORAGE (§55.4.12.7.1.c, §55.4.12.8)

A total of 2,850,000 gallons of water storage is proposed. Water will be stored on-site in one agricultural pond with 2,650,000-gallon capacity, and forty (40) plastic tanks, each with 5,000-gallon capacity (total 200,000 tank capacity). Two (2) of these tanks shall be reserved for fire suppression and prevention uses (total 10,000 gal).

#### 3.2.3. WATER REQUIRED

A total of 2,953,733 gallons will be required for all Project activities and associated demands, such as evaporation, farmworker/employee residential use, and fire suppression. Please see Table 2 for monthly water requirements by category (fire suppression is not included).

##### 3.2.3.1. Evaporation

Evaporation has been calculated from May – September using local estimates of approximately 0.5 ft per month. Please see Table 2.

### 3.2.3.2. Processing

Processing water use primarily includes employee hydration and employee and workspace sanitation. Processing water use averages 200 gallons per week when activities occur (Table 2).

### 3.2.3.3. Resident Employees

Farmworker housing water use is estimated at 40 gal/day per person. This is for all domestic use, including but not limited to: drinking, toilet facilities, laundry, other sanitation, pets, and small vegetable garden uses. Farmworker water use is shown in Table 2.

### 3.2.3.4. Fire Suppression

A designated amount of water shall be kept on-site for fire suppression purposes. This amount is 10,000 gallons and will be reserved in two (2) plastic tanks labeled as "FIRE".<sup>4</sup> The water tanks containing the designated water supply shall be linked to a standpipe that meets CCR Title 14, Division 1.5, Chapter 7 requirements (CalFIRE SRA Fire Safe Regulations) and HCC § 3114-4 (SRA Fire Safe Regulations).

**Table 2. Monthly and Annual Water Requirement (in Gallons) by Demand Category for CISCO FARMS INC. on APN 105-101-011 et al.**

Month	All Cultivation	Pond Evaporation	Processing	Employee Residence	Total Water Required
January	11,530	-	886	4,960	17,376
February	28,862	-	800	4,480	34,142
March	67,067	-	886	9,920	77,872
April	245,149	-	857	9,600	255,606
May	321,237	173,424	886	9,920	505,467
June	338,338	155,302	857	9,600	504,097
July	413,218	136,775	886	9,920	560,798
August	372,951	116,066	886	9,920	499,823
September	275,926	96,362	857	9,600	382,745
October	65,121	-	886	9,920	75,927
November	9,716	-	857	8,480	19,053
December	4,982	-	886	4,960	10,827
<b>TOTAL</b>	<b>2,154,095</b>	<b>677,929</b>	<b>10,429</b>	<b>101,280</b>	<b>2,943,733</b>

Note: Components may not sum to totals because of rounding.

<sup>4</sup> The 10,000 gallons reserved for Fire Use only is not included in Table 2, as it will hopefully be a one-time input and will not be used or required on an annual basis.

### 3.2.4. WATER USE (§55.4.12.7)

A total of 2,154,095 gallons of water will be required annually for cannabis irrigation activities at full capacity. See Tables 3 and 4 for a breakdown of use by cultivation area and water use per square foot by cultivation area.

#### 3.2.4.1. Cultivation of Mature Plants

Water will be used on-site for crop irrigation, fertilization, and pest management activities. Water use amounts associated with cultivation have been calculated based on the number of plants expected to be grown and number of cycles at maximum capacity. This amount per plant includes regular crop irrigation in addition to feedings (late-March through early-November) and < 1 gallon per plant at transplant times. Throughout their life-cycle, rooted individual plants will be watered only by focused drip irrigation or hand-watering methods. Both methods will ensure maximal water use efficiency and that no runoff is created. Clones in the nursery operations will be watered via misting methods. Cultivation-specific water use by method is shown in Table 3.

#### 3.2.4.2. Commercial Nursery

The watering regime for the nursery is based on the number of clones and potted juvenile plants in aggregate for any one week during the year. Water use is estimated based on an average production capacity of 8,450 clones per week year-round and an average weekly holding of 13,510 small pots and 8,454 1-gallon pots during February – September (Table 3).

Table 3. Monthly and Annual Water Use for Irrigation (in Gallons) by Cultivation Area for CISCO FARMS INC. on APN 105-101-011 et al.

Month	Mixed-Light	Light-Dep	Full-Sun Outdoor	Nursery	Total Cultivation
January	-	-	-	11,530	11,530
February	-	-	-	28,862	28,862
March	11,575	-	-	55,492	67,067
April	112,011	70,438	-	62,700	245,149
May	117,239	116,771	20,211	67,016	321,237
June	113,878	112,568	67,998	43,894	338,338
July	117,239	116,646	128,600	50,733	413,218
August	117,674	116,460	128,600	10,216	372,951
September	47,231	99,068	124,452	5,174	275,926
October	-	-	61,767	3,354	65,121
November	-	-	6,849	2,867	9,716
December	-	-	-	4,982	4,982
<b>TOTAL</b>	<b>636,847</b>	<b>631,951</b>	<b>538,478</b>	<b>346,819</b>	<b>2,154,095</b>

Note: Components may not sum to totals because of rounding.

Table 4. Water Use per Square Foot by Cultivation Area for CISCO FARMS INC. on APN 105-101-011 et al.

Mature Plant Cultivation	Mixed-Light Greenhouse (ML)	14.6	8.3
	Light-Dep Greenhouse (GH)	14.5	
	Full-Sun Outdoor (OD)	4.1	
Nursery			5.1
<b>TOTAL</b>			<b>7.5</b>

3.2.5. IRRIGATION PLAN (§55.4.12.7.1.A,B,C)

All irrigation water will be sourced from the pond and storage tanks designated for such, which will have a total combined capacity of 2,840,000 gallons. A maximum of ~115 gallons per mature full-sun plant are anticipated (Table 5) and ~27 gallons per plant in light-deprivation (“light-dep”) and mixed-light operations (3 rounds, approximately 8-10 weeks each; Table 6). All water shall be applied at agronomic rates. For clone rearing, a misting system will be used that applies water at a rate of approximately 0.042 gallons (0.67 cups) per tray per week. For cultivation beyond the clone stage, the Project will utilize focused drip irrigation systems and/or top feed hand watering to provide direct-to-root irrigation with minimal or no water waste. A limited amount of hand-watering will be done at time of transplant for full-sun plants (~1 gal per plant) and during any top-dress fertilization or amendment. All irrigation via drip method is limited by timers, so a precise amount of water per plant is applied. Timers also have the benefit of limiting water loss via any spontaneous leaks that may arise.

Table 5. Drip Irrigation Rates for CISCO FARMS INC. for Full-Sun Plants

Dates (approximate)	# Weeks	Water Amount (gal/plant/week)	Total (per plant)
May 20 - Jun 15	3.86	2.5	9.6
Jun 16 - 30	2.14	4.0	8.6
Jul 1 - Sep 30	13.14	6.0	78.9
Oct 1 - 31	4.43	4.0	17.7
<b>TOTAL</b>			<b>114.8</b>

Table 6. Drip Irrigation Rates for CISCO FARMS INC. for Light-deprivation and Mixed-light Plants

# WEEKS (AVG)	WATER AMOUNT (GAL/PLANT/WEEK)	TOTAL (PER PLANT)
9	3.0	27.0
<b>TOTAL</b>		<b>27.0</b>

### 3.2.6 WATER CONSERVATION MEASURES (§55.4.12.7.1.D)

On-site water management and conservation activities include:

- Timed drip irrigation applied at agronomic rates
- Any exposed soils are mulched and/or cover-cropped to reduce evaporative loss
- Groundcover and/or mulch used in cultivation area
- Substantial percentage of water sourced from rainwater catchment
- Float valves installed in all tank inlets
- Regular monitoring for leaks at designated intervals
- Using mixed-light and/or deprivation techniques to produce smaller plants which require less water per plant throughout the season
- Low flow toilets & shower in employee bathrooms and housing

### 3.2.7. MEASUREMENT & RECORDKEEPING (§55.4.12.7.5,6,7)

Water meters will be installed at the well and all exit points from storage facilities (i.e. pond and tanks), to account for and report actual water used, which will be recorded weekly and reported in accordance with local and state guidelines. The water level in all storage facilities will be visually monitored once per week during the spring/summer/falls months and at least 2 times per month during the winter months, and it shall be recorded at least once per month. Safety valves (volume or time-oriented) shall exist at all storage facility main exit points so that in the event of a leak, only a limited amount of water can be lost.

During the spring/summer/fall months, leaks will be monitored for at least once per week in all lines and fittings, or more frequently after unusual wind events. During other times of the year, leaks will be checked for through regular visual inspection of storage facilities and irrigation lines conducted at least 2 times per month, or after large storm events.

## 3.3. AGRICULTURAL CHEMICALS STORAGE & USE

When not in use, all nutrients, fertilizers and amendments (collectively “agricultural chemicals”) associated with cultivation will be stored in the westernmost drying/storage building in an enclosed, locked area designated as such. All agricultural chemicals associated with commercial nursery activities will be located within the indoor structures for each, respectively, within a locked cabinet and/or room. It is anticipated that most soil amendments will be purchased in bulk and immediately mixed into the soils or planting medium, so storage requirements for these particular compounds are minimal. If amendment storage is required, it will occur in the same locations mentioned previously. All agricultural chemical location storage locations shall have impervious floors and be completely protected from wind or rain to prevent any leachate from entering groundwater or any debris from entering surface waters. All agricultural chemicals shall

be contained within their original labeled containers and stored in accordance with manufacturer instructions, within secondary containment (bins). Pesticides will be stored in a separate compartment or bin from the fertilizers and amendments if their composition requires such measures.

BPTCs will be employed when storing, handling, mixing, applying and disposing of all fertilizers, pesticides and fungicides. All agricultural chemicals shall be applied according to manufacturer instructions and at manufacturers' suggested rates, or less. Application rates and times for all pesticides will be tracked and reported as required by CDPR and the County Agricultural Commissioner. Application rates for fertilizer will be tracked monthly in accordance with SWRCB requirements.

The Applicant already possesses a pesticide application certification (i.e. Private Applicator Certificate / PAC) received through the County Agricultural Commissioner. This PAC meets state DPR requirements for a Qualified Applicator License. Any applicable employees will also be trained to handle, mix, apply, and dispose of pesticides/fungicides with proper hand, eye, body, and respiratory protection in accordance with the manufacturer recommendations and CDPR requirements. Agricultural chemical safety procedures include fire safety, use of rubber (or similar material) gloves and respirators (if applicable), proper hand washing guidelines, and emergency protocols. The material safety data sheets (MSDS) for each chemical will be kept on site and accessible to employees. The Applicant and any employees will also be trained in spill prevention, countermeasures, and cleanup protocols should emergency arise. Spill kits will be available in areas designated for agricultural chemical storage. A shower will be located in the ADA bathroom in the processing building in the event of a spill or exposure resulting in skin contact.

The Applicant will use the following soil amendments/nutrients (or similar) for the proposed cultivation and nursery operations:

- Trace minerals mix
- Pacific oyster shell
- Gypsum
- Lime
- Dolomite
- Azomite

The Applicant anticipates using the following fertilizers/nutrients (or similar) for the proposed cultivation and nursery operations:

- Earth Juice Rainbow Mix Pro Grow
- Earth Juice Rainbow Mix Pro Bloom
- General Hydroponics Grow (various products)
- General Hydroponics Bloom (various products)

The Applicant will use the following pesticides for the proposed cultivation and nursery operations:

- Sulfur products (e.g. soaps, sprays)
- Neem oil and other plant oils (e.g. garlic, cottonseed, corn, soybean, clove)
- Green Cleaner
- Dr. Zymes
- Regalia and Regalia PTO (*Reynoutria sachalinensis*)
- Grandevo WDG and Grandevo PTO (*Chromobacterium subtsugae*)
- Venerate XC (killed *Burkholderia spp.*)
- Biological controls (e.g. ladybugs, predator mites, praying mantis)

Integrated pest management strategies that include chemical, biological, and cultural controls are used so that only affected areas are treated when there is an economic benefit. Pests and diseases are controlled with biological controls, bioinsecticides, and/or plant essential oils and/or beneficial bacteria. No rodenticides will be used on site. Please see the accompanying *Pest Management Plan*.

### 3.4. SOILS MANAGEMENT PLAN

Existing site soil is classified as not prime agricultural soils. Cultivation of mature plants will occur in amended native soil in tilled beds for full-sun plants. For light-dep greenhouse and mixed-light greenhouse operations, plants may be planted either in tilled beds using amended native soil or in pots using amended native soil or completely imported soil, or a mixture of both. Any imported soil used in pots will be recycled for on-site use in subsequent years.

There will also be input of imported soils to all cultivation areas on an annual basis when immature plants are transplanted into the canopy areas. Immature plants will be grown to a maximum size of 1-gallon bags or pots in the nursery in manufactured potting soil. It is estimated that up to 486 yd<sup>3</sup> of soil per year may be imported for this use. Bulk soil will initially be deposited in the Soil Management Area designated on the Site Plan and then taken from there

to various on-site facilities, as needed. All imported soil will be incorporated into the cultivation areas and/or recycled for on-site use in subsequent years.

Commercial wholesale nursery activities will also require imported manufactured soil. It is estimated that 85 yd<sup>3</sup> will be used for this purpose. It is anticipated that nearly all of this soil will be transported off-site when wholesale nursery plants are purchased by other cultivators or distributors.

Any remaining soil piles at the onset of the winter season (November 15 or the first fall rains, whichever is sooner) shall be tarped and surrounded by straw baffles. The cultivation area and all other disturbed areas will be seeded with cover crop in the fall of each year. Each spring, some amending of the native soil with composted manures and other agricultural minerals will take place, dependent on the results of yearly soil tests.

Other than through commercial wholesale plant transactions, no manufactured soil is expected to be removed from the site or disposed off-site.

### 3.5. WASTE / MATERIALS MANAGEMENT PLAN (§55.4.12.1.13)

#### 3.5.1. CANNABIS-RELATED PRODUCTS

All employees will receive job-specific training on the proper handling of live plants and fresh and dried flower, trim, and any other non-manufactured cannabis products. Such training includes cultivation and harvesting techniques, hand tool use, and proper Personal Protective Equipment (PPE) storage and use.

#### 3.5.2. AGRICULTURAL CHEMICALS

Relevant employees will be trained on the proper storing, handling, mixing, and application of all amendments, fertilizers, and pesticides, and proper PPE use. All agricultural chemicals will be applied according to manufacturer recommendations. Please see previous Section 3.3 for more details.

#### 3.5.3. CULTIVATION & NURSERY PLANT WASTE

Vegetative matter such as root balls, branches, leaves, and other plant material will be composted on-site in designated compost areas located near each cultivation and nursery area. Each compost area will be approximately 20 ft by 20 ft; It is estimated 4 compost areas will be necessary (please see Site Plan for locations).

No materials associated with the cultivation and processing of cannabis will be burned (CCLUO §55.4.12.1.9).

#### 3.5.4. SOLID WASTE

All other wastes, including cultivation-related (non-plant material) refuse, household refuse and recycling, plastics, packaging, irrigation, pots, lighting, pond liners, electrical fixtures, wiring, and fencing shall be collected in designated trash and recycling containers that are covered and will be located on-site within or adjacent to the following structures: westernmost drying/storage structure at the northern edge of the full-sun outdoor cultivation area, processing building, indoor commercial nursery buildings, and farmworker housing unit/s. The storage areas for trash and recycling will be covered and off the ground. The location of the receptacles shall prevent storm water contamination and leachate from entering or percolating to receiving waters. The containers will also be restricted from animal access. Solid waste and recycling will be hauled off-site by the Applicant at least 2 times per month, or as necessary. Please see the attached Site Plan for structure locations.

#### 3.5.5. HAZARDOUS WASTE

Although their production is not anticipated, any hazardous wastes, such as fuels or solvents, shall be logged, stored in secondary containment, and taken to a County-approved hazardous materials collection facility, as appropriate. An EnviroStor Database search was performed, and no hazardous waste sites were found within at least a 5,000 ft radius of the site.

#### 3.5.6. WASTEWATER / SEWAGE DISPOSAL PLAN

Since irrigation shall be applied at agronomic rates, no effluent from cultivation (cultivation wastewater) is anticipated at the site. For handwashing, toilet, and household effluent, an on-site wastewater treatments system (OWTS) is proposed that will service the processing area, kitchen, restrooms, and employee housing units. The OWTS shall be designed to accommodate the number of anticipated daytime and resident employees and processing facility. Please see the Site Plan for proposed leach field (septic drainfield) location. The Applicant will work with the County to ensure all necessary permits are on-file for these facilities prior to construction. The OWTS will be serviced by a licensed septic pumping professional at least once per year, prior to the winter period (November 15), or more frequently, as necessary.

### 3.6. LIGHT POLLUTION CONTROL PLAN (§55.4.12.4)

All lighting associated with cultivation, nursery, and processing activities shall be shielded by use of tarps or other covers, and, where applicable, window shades or blinds. No lighting will be used in Full-sun outdoor (OD-1) or Light-dep greenhouse (GH-1) cultivation areas. Mixed-light gutter-connect greenhouses (ML-1) will contain artificial lighting at an intensity not to exceed 25 watts/sf (CDFA Mixed-Light, Tier 2 maximum intensity). The gutter-connect greenhouses and any nursery greenhouse containing lighting shall be equipped with automated blackout tarp systems. The tarps will be deployed a minimum of one half-hour before sunset and one half-hour after sunset whenever supplemental lighting is in use. This will be so that no light escapes from sunset

to sunrise to meet LZ-0 and LZ-1<sup>5</sup> standards, providing for a dark ambient environment. Exterior and task lighting shall only be used for basic human safety and basic operations. Exterior permanent artificial light fixtures shall exist only where necessary for safety, where mandated by codes, or where a discreet need is identified, shall be angled downward, and shall be extinguished when not in use.

### 3.7. NOISE SOURCE ASSESSMENTS & MITIGATION PLAN (§55.4.12.6)

Noise levels will increase for a brief period of time during construction activities throughout the phase-in period of the project for 1-5 years while the facilities are being constructed. Typical construction equipment may include a dozer and backhoe, although minimal grading and site preparation are anticipated due to the relatively flat topography of the site. Equipment noise is predicted to be a maximum of 85 dBA at a distance of 50 ft (with acoustical usage factor of 40%).<sup>6</sup> The impacts will be temporary in nature and will end when construction is complete. Weather-permitting, construction activities will attempt to occur between September 1 – and November 15 each year to avoid noise disturbance to migratory nesting birds. Noise will also increase at the start of each cultivation season as cultivation areas are tilled with a tractor, with a slightly less noise output to that of construction equipment (84 dBA @ 50 ft, usage factor 40%). The activities generating equipment noise shall be limited to daylight hours as specified in CCLUO 2.0 §55.4.12.2.8.

Noise from project operations will come from the general occupation of the Project areas. The only anticipated potential on-going noise sources may be greenhouse fans and vehicular traffic to and from the Project site. Fan noise will be attenuated by installation design, placement/orientation (away from property lines and forested areas), and model selection. The noise from all potential sources will be monitored throughout the year at the identified noise measurement sites on the Site Plan: the western property boundary closest to any greenhouse structure containing a fan and at riparian edges and forested zones to the north of the site. No other sensitive receptors are located within 600 ft of the project site.

Current ambient noise levels range from 30 dBA to 58 dBA (wind speed 2 - 18 mph). All cultivation, nursery, and processing activities shall not increase ambient noise levels by more than 3 decibels as measured at each property line.

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<sup>5</sup> Lighting Zone 0 and Lighting Zone 1, as defined by the International Dark-Sky Association and the Illuminating Engineering Society of North America

<sup>6</sup> Federal Highway Administration *Construction Noise Handbook*,  
[https://www.fhwa.dot.gov/environment/noise/construction\\_noise/handbook/handbook09.cfm](https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm)

### 3.8. WATERSHED & HABITAT PROTECTION

#### – SWRCB CANNABIS CULTIVATION GENERAL ORDER & POLICY COMPLIANCE SUMMARY

The Applicant has enrolled in SWRCB Order No. 2019-0001-DWQ as a Tier 2 Discharger. A Site Management Plan (SMP) is being developed in accordance with enrollment. Adherence to the SMP will ensure that the watershed and surrounding habitat are protected. All areas of cannabis activities, including cultivation, shall occur on slopes less than 30% and outside of the listed riparian setbacks (relevant 150 ft, 100 ft, and 50 ft) in the Order. Below is a summary of how the proposed activities will meet BPTCs for each relevant category listed in Attachment A (Cannabis Cultivation Policy) of the Order. Where these elements have previously been described in detail herein, the section number is noted for reference.

#### 3.8.1. LAND DEVELOPMENT & MAINTENANCE, EROSION CONTROL & DRAINAGE FEATURES

Site development and maintenance activities will utilize BPTCs in accordance with the SWRCB recommendations. Grading and earthwork activities will be conducted by a licensed contractor in accordance with approved local grading permits and the SMP. Implementation of the SMP will further disconnect any hydrologically connected road reaches and roadside ditches from on-site watercourses to the greatest degree feasible through the installation of rolling dips and additional ditch relief culverts. See § 3.1 for more descriptions.

#### 3.8.2. STREAM-CROSSING INSTALLATION & MAINTENANCE

See § 2.2.1.1 for a detailed description of activities and associated BPTCs.

#### 3.8.3. SOIL DISPOSAL & SPOILS MANAGEMENT

No soil will be taken off-site. All unused soil and soil piles shall be tarped and baffled when not in use. Any spoils from construction activities shall be distributed according to the BPTCs outlined in the SWRCB Order, Attachment A.

#### 3.8.4. RIPARIAN & WETLAND PROTECTION & MANAGEMENT

The Applicant will observe all necessary and required setbacks from wetland and riparian areas. Noise will be measured at the nearest riparian drip edge throughout the year, as cannabis activities take place year-round. The Project will result in no discharge of agricultural water to any of the water features on or near the Project site. No non-invasive trees or other vegetation shall be removed from riparian and wetland areas. Any invasive plants found within such areas will be removed via manual methods with minimal ground disturbance.

#### 3.8.5. WATER STORAGE & USE

See § 3.2 for a detailed description of water storage, use, and BPTCs for water conservation.

#### 3.8.6. FERTILIZERS, PESTICIDES & PETROLEUM PRODUCTS

All the BPTCs described previously in § 3.3 of this document will be utilized. Petroleum products will be stored separately from fertilizers and pesticides in lawful containers within secondary

containment. All refueling and equipment maintenance of small motors shall be done within secondary containment, and any equipment maintenance involving larger motors (e.g. tractor) will be done off-site or within a covered garage with impermeable floor located elsewhere on the Property (not part of the cannabis operation).

#### 3.8.7. WASTES

See § 3.5, previously, for a detailed description of waste handling BPTCs that will be used.

#### 3.8.8. WINTERIZATION

The Applicant will complete all necessary winterization activities listed in the Order by November 15 of each year. The cultivation area shall also be cover-cropped by this date each year.

### 3.9. INVASIVE SPECIES CONTROL PLAN SUMMARY (§55.4.12.16)

A site-specific Invasive Species Control Plan (the “Plan” in this section) was prepared for the Project (please see additional documentation). Nine (9) invasive species – all plants – were identified in the Project area. The Plan lists manual removal as the most likely effective management method for most of the 9 species, with some additionally responding to grazing, burning, or tilling. The Applicant shall follow recommendations outlined in the Plan with regard to management, timing of efforts, and removal and disposal.

In addition, the water storage pond has the potential to harbor the invasive American bullfrog (*Lithobates catesbeianus*). A *Bullfrog Monitoring and Management Plan* (created by CDFW) will be utilized to conduct regular annual surveys and undertake eradication methods should the animals be found. Please see the *Invasive Species Control Plan* and the *Bullfrog Monitoring and Management Plan* for additional details.

### 3.10. ENERGY PLAN (§55.4.12.5)

#### 3.10.1. ELECTRICITY

Energy shall be required for cultivation (fans and lighting, where applicable), nursery activities, drying, processing, and resident employee uses, as applicable. At total of 639,962 kwh is predicted once the Project reaches full capacity and is based on (and limited by) 600-amp service by PG&E. It is estimated that the earliest this service would be available is 2026. Please see the Energy Budget in Table 7 for a breakdown of electricity use by month for each activity requiring electricity.

Energy shall be provided via grid power either from PG&E or Redwood Coast Energy Authority (RCEA), or via a combination of grid power and on-site solar array. Options are listed below.

- PG&E: In 2019 (the most recent year data is available), all of PG&E’s power mix was greenhouse-gas free.<sup>7</sup> The “Base” and “50% Solar Choice” plans provide 28.5% and 64.3% renewable<sup>8</sup> energy, respectively, according to PG&E’s 2019 Power Content Label.<sup>9</sup> If the Applicant opts for either of these plans, then they will purchase carbon offset credits to mitigate the portion of energy not supplied by renewable resources. Credits will be purchased from a reputable source recognized by relevant state regulatory agencies.
- PG&E: The “100% Solar Choice” plan provides 100% renewable energy, according to PG&E’s 2019 Power Content Label. The Applicant would not need to purchase carbon offset credits.
- RCEA: Through the “RePower+” service, RCEA is able to provide up to 100% renewable energy for its customers. This would mean the Applicant would not need to purchase carbon offset credits.
- The Applicant does intend to install a permitted solar array that is tied to the grid. This would help offset the amount of electricity use from PG&E, including the percentage of PG&E power that is not defined as renewable. Utilizing all south-facing solid roof surfaces on proposed buildings for the array/s, electricity production capacity is estimated to be 565,896 kWh (OurEvolution Engineering, Inc.; see *Site Plan* for details). When on-site solar is installed, the Applicant will provide evidence of grid-power offset as relevant to the energy used for cultivation, nursery, and processing activities when such evidence is requested by the Department.

Generator use shall be limited to “emergency” use only, as defined in CCR Title 17, Division 3, Chapter 1, Subchapter 7.5, §93116.2(a)(12), or the “emergency use” definition for stationary engines in Title 17, Division 3, Chapter 1, Subchapter 7.5, § 93115.4(a)(30).

### 3.10.2. HEATING

Heating will be necessary for nursery activities. This will occur in 4 stand-alone greenhouses, 10,000 sf gutter-connect greenhouses, and both indoor nursery facilities. Heating will be accomplished through the use of commercial propane heaters designed for such uses, and may be either direct ambient air type or through radiant floor heating infrastructure via boiler system. Heating will bring internal greenhouse temperatures to ~50°F during the coldest months, approximately January – April, and ~60°F inside the buildings from November – April.

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<sup>7</sup> [https://www.pge.com/en\\_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page](https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page)

<sup>8</sup> A significant portion of PG&E’s energy supply comes from large hydroelectric power stations which do not qualify as an eligible renewable resource under California law

<sup>9</sup> <https://www.energy.ca.gov/filebrowser/download/3245>

The mechanical heating capacity will not exceed 10 BTU/hour per square foot, per County building regulations for Ag-exempt structures. A Title 24 Building Energy Requirement for Plant Growth exemption letter certifying the heating is not for human occupancy will be obtained from a qualified Energy Consultant and supplied to the Department during the building permit application process. Total annual propane usage is estimated at 2,317 gallons.

Table 7. Energy Use per Cannabis Activity by Month, in kilowatt-hour, for CISCO FARMS INC. on APN 105-101-011 et al.

Description of Activity	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL BY ACTIVITY
Mixed-Light Cultivation	-	-	9,801	78,374	80,521	76,954	80,239	80,635	50,366	-	-	-	<b>456,889</b>
Nursery Lighting	11,383	13,258	13,628	12,792	13,218	12,792	13,218	12,437	8,508	7,633	3,528	3,646	<b>126,043</b>
Drying	-	-	-	-	471	1,420	753	1,138	1,138	2,905	2,096	-	<b>9,921</b>
Processing	2,680	2,433	2,680	2,598	2,680	2,598	2,680	2,680	2,598	2,680	2,598	2,680	<b>31,581</b>
Utility, gen. lighting, security, etc.	224	202	224	217	224	217	224	224	217	224	217	224	<b>2,637</b>
Farmworker Housing <sup>†</sup>	1,095	989	1,095	1,060	1,095	1,060	1,095	1,095	1,060	1,095	1,060	1,095	<b>12,892</b>
<b>TOTAL BY MONTH</b>	<b>15,382</b>	<b>16,882</b>	<b>27,428</b>	<b>95,040</b>	<b>98,208</b>	<b>95,040</b>	<b>98,208</b>	<b>98,208</b>	<b>63,886</b>	<b>14,537</b>	<b>9,498</b>	<b>7,644</b>	<b>639,962</b>

<sup>†</sup><https://www.eia.gov/tools/faqs/faq.php?id=97&t=3#:~:text=How%20much%20electricity%20does%20an,about%20877%20kWh%20per%20month>

### 3.11. SECURITY PLAN

Access to the cultivation, nursery, processing, and storage facilities will be secured and restricted. The cultivation premises and any associated facilities shall be locked when not staffed. Only employees or contractors of the Applicant and designated county and state officials shall be allowed to enter the garden sites or any other associated cultivation facilities. All employees and contractors of the Applicant shall be at least 21 years of age.

The site is not visible from high-traffic public roads, and no high-density residential, commercial, school, or other uses are located near the Project site. Access to the Property is via a locked gate. Additionally, it is anticipated that the Project site will be entirely enclosed within wind-fencing or wind-rows, and access will be via a locked gate/s. All buildings associated with cannabis cultivation, nursery, processing, and storage will be locked when not staffed or in use.

To ensure against diversion to illegal marketplaces, the Applicant will be a participant in the California Cannabis Track-and-Trace (CCTT) system. The Applicant has also delineated specified areas for materials holding and/or destruction, as may be deemed necessary according to state regulations. The Applicant shall also comply with any forthcoming safety and security regulations that may be specified by the county or state. All appropriate and pertinent records, permits, and licenses shall be on-hand at the Project site, pursuant to County and state regulations.

## 4. CANNABIS ACTIVITIES

Five (5) main activities are proposed at the Project site: commercial nursery / Community Propagation Center, cultivation, drying, processing and packaging (ancillary and Cannabis Support Facility / commercial), and transport-only self-distribution. All activities are proposed as “new” as defined by CCLUO 2.0. Please see the Site Plan for location and layout. It should be noted that all facilities and cultivation areas are orientated in such a manner as to minimize the effects of wind at the site.

### 4.1. COMMERCIAL NURSERY / COMMUNITY PROPAGATION CENTER

#### 4.1.1. FACILITY DESCRIPTION

Exact area dimensions for specific nursery activities will vary and depend on the needs and demands of other local cultivators that desire to utilize the Community Propagation Center. The nursery area is proposed under a phase-in approach. Nursery space will be added incrementally each year, totaling 46,320 by 2025. An additional 21,440 sf is proposed in 2026, depending on power availability at the site. The commercial nursery facility / community propagation center is composed of three main spaces.

#### 4.1.1.1. Greenhouses

This component is sixteen (16) stand-alone greenhouses totaling 40,320 sf. Greenhouses will house immature cannabis plants and immature cannabis plants intended for clone production (“mother” plants). Artificial light will be used in the greenhouses at a sufficient level to keep plants in a vegetative state but not intended to produce vegetative growth. Greenhouses may be heated during winter and early spring months.

#### 4.1.1.2. Enclosed Nursery

This is an indoor commercial nursery facility totaling 6,000 sf housed in 2 buildings, each with a footprint of 3,000 sf. Clones, mother plants, and small immature cannabis plants will be housed within this space, particularly during winter months. It is projected that clones will occupy a combined area of at least ~800 sf within the two buildings. Minimal artificial (fluorescent and/or LED) lighting will be used for cloning operations. Mother plants and small pots of immature plants intended for sale or transfer will occupy ~4,600 sf of the of combined space in the two buildings during cooler months, and potentially year-round, depending on weather and operational logistics. Artificial lighting will be used to keep plants alive and in a vegetative state. Additional space within the building is designated for storage.

#### 4.1.1.3. Gutter-connect greenhouses

In 2026 and beyond, additional gutter-connect greenhouse space totaling 21,440 sf will be used to house additional mother plants and small pots of immature plants once Project facilities reach maximum operational capacity. The floor of the greenhouses will be gravel with inlaid radiant heating where applicable.

### 4.1.2. OPERATIONS

This is proposed as a Cannabis Support Facility and will be operated as a commercial nursery with two main purposes: 1) produce clones and immature plants for wholesale and/or transfer to other cultivators and distributors, and 2) serve as a Community Propagation Center that houses immature plants and clones from/for other local cultivators.

#### 4.1.2.1. Mother plants

Initially, immature “mother” plants will be started from seeds or clones obtained from a licensed nursery. Thereafter, cuttings (clones) will be taken from the current stock of mother plants in order to create the next batch of mother plants. Mother plants are only grown for a short time; once all possible clones (for future mothers and on-site cultivation plants) from a plant are obtained, the plant is destroyed and composted. Thus, mother plants are created continuously throughout the year. Mother plants are not allowed to flower, which will require supplemental lighting in certain periods of the year when daylight hours approach 12 or less hours. For the Community Propagation Center, genetic material and/or plants that result in mother plants may also be brought to the facility by cultivators who also hold a state-issued self-distribution license.

These particular mothers may be kept in a vegetative state for different periods of time, depending on the specific needs of cultivators holding genetic stock at the facility. Mother plants are not allowed to flower, which will require supplemental lighting in certain periods of the year when daylight hours approach 12 or less hours. All activities shall be recorded in the CCTT system.

#### 4.1.2.1. Clones and immature plants for sale

Clones will be taken from the mother plants year-round, with January – mid-July being the most intensive months (facility at full capacity). From mid-July – December, cloning operations will be approximately 1/3 of operations in the first half of the year. Clones will be reared under artificial lighting in the indoor commercial nursery building. Clones will be situated on cloning racks that occupy approximately 800 sf of floor space. The Applicant will sell clones when they are 2-4 weeks old at the rooted stage, but still in “cube” medium (biodegradable non-soil medium).

Some cultivator customers may desire potted immature plants. For such orders, clones will be up-potted to 5-inch and 1-gallon pots after 2-4 weeks using imported soil. The potted plants will be grown in the stand-alone and gutter-connect greenhouse spaces designated for the commercial nursery. Plants remain in 5-inch pots for approximately 4 weeks and then are up-potted into 1-gallon pots. Plants may remain in 1-gallon pots for up to 4 weeks prior to sale or transfer. All activities shall be recorded in the CCTT system.

#### 4.1.2.2. Community Propagation Center

A portion of the commercial nursery facility will house cultivator-specific genetic stock (mother plants) and also serve to rear associated clones and immature plants associated with that stock. Clones and immature plants will then be transported back to the cultivators’ licensed premises (off-site farms) for cultivation, following state guidelines. All activities shall be recorded in the CCTT system.

## 4.2. CULTIVATION / CULTIVATION PLAN

### 4.2.1. FACILITY DESCRIPTION

A total of 217,800 sf cultivation will occur on-site. All cultivation is classified *new open-air cultivation*, as defined by CCLUO 2.0. Cultivation of mature plants will occur in amended native soil in tilled beds for full-sun plants. For any and all greenhouse operations, plants may be planted either in tilled beds using amended native soil or in pots using amended native soil or completely imported soil, or a mixture of both. Three main methods of cultivation will be employed.

#### 4.2.1.1. Full-sun outdoor – outdoor garden area

This plot shall be 130,680 sf (3 acres) of canopy in a total disturbed cultivation area that is ~10 acres. The layout assumes a 6-ft diameter plant and is proposed as forty-five (45) 600-ft rows

and one (1) or two (2) comprising 731 ft. Plants are positioned at 6-foot centers between plants within the same row, and 16-ft centers between plants in different rows, thus allowing for 10-ft aiseways between rows where no canopy will occur. This will allow tractor access between rows and facilitate County compliance inspections. However, at the beginning of any given year, the Applicant may propose to reconfigure the outdoor cultivation area (e.g. no or reduced aiseways) and will seek County approval to do so prior to cultivation by submitting a revised Site Plan and any other required documentation and/or forms.

#### 4.2.1.2. Light-deprivation – greenhouses

This area is a total of 43,560 sf (1 acre) in seventeen (17) greenhouses that measure 105' X 24' (2,520 sf) and one (1) that is 30' X 24' (720 sf). Cannabis will be grown using light-deprivation techniques *without* the use of any artificial light in the canopy area, producing 2-3 cycles per year (weather-dependent). Black-out plastic sheeting will be used to exclude natural light, when appropriate.

#### 4.2.1.3. Mixed-light – gutter-connect greenhouses

This is a total of 43,560 sf grown in gutter-connect greenhouses with the use of supplemental artificial lighting in the canopy area at an intensity consistent with the CDFA Mixed-light Tier 2 classification ( $\leq 25$  watts/sf). Three harvests per year are expected. The floor of the greenhouses will be gravel with inlaid radiant heating where applicable. These greenhouses shall also be gutter connected to the greenhouses containing additional commercial nursery space. Exact dimensions of greenhouses have yet to be determined, but total structural footprint (including nursery greenhouses) is 325' X 200'.

### 4.2.2. OPERATIONS

Up to three (3) rounds of cultivation will occur each year in the light-dep greenhouses and mixed-light gutter-connect greenhouses. One (1) round of cultivation will occur in the full-sun area, unless auto-flower plants are used, which may produce two (2) rounds. All activities will be entered in the CCTT systems as required. Please see the *Schedule of Activities* section below for more details regarding timing.

#### 4.2.2.1. Propagation

All plants will be started in clone or seedling (juvenile) form from the on-site nursery. Propagation activities will occur continuously from January – August as cultivation areas are planted in succession.

#### 4.2.2.2. Planting

In general, planting will be offset by 0.5 acres per week, facility-wide. Plants will be transferred from the nursery spaces directly to the canopy (cultivation) areas. Up to one (1) gallon of water per plant may be used at time of transplant.

#### 4.2.2.3. Cultivation / vegetative growth & flowering

During this stage, plants are monitored for health and progress. Plant-management activities include pruning and de-leaving, with all excess plant material placed in designated compost areas. Other main activities include irrigation and administration of fertilizers, pesticides, and compounds or teas to maintain plant health and vigor. Integrated pest management strategies – including application of biological controls – are employed to minimize pest infestation. Any necessary weeding is done by hand or using a tractor implement, if space configurations permit.

#### 4.2.2.4. Harvest

Plants will be harvested in up to 3 cycles in the mixed-light greenhouses and light-dep greenhouses and 1-2 cycles for the outdoor full-sun plot. Harvest will occur at the rate of approximately 0.5 acres per week for all areas, so that drying and processing activities may be offset. In general, upon maturation, plant material will be harvested into manageable pieces and weighed, in compliance with CCTT requirements. Plant material is placed in totes and then taken to drying buildings. Some fresh plant material may also move immediately off-site to distribution or manufacturing at this time. Post-harvest, root-balls may be extracted from cultivation areas and placed in the compost areas and/or tilled in with a tractor where feasible.

### 4.3. DRYING

#### 4.3.1. FACILITY DESCRIPTION

Four (4) buildings, each with a footprint of 4,800 sf (19,200 sf total) will serve as a drying facility for all cannabis grown on-site and from the Applicant's other cultivation operations on nearby parcels.

#### 4.3.2. OPERATIONS

If cannabis is to be dried, it will be taken to one of the drying buildings and hung to dry for several days. The building may be equipped with fans and air conditioning and/or heating units (specifically for non-human use) and/or dehumidification units for proper curing and elimination of conditions that promote mold. The interior of the drying buildings shall remain unfinished, per Building Department "Ag-exempt" permit regulations. (A Title 24 Building Energy Requirement for Plant Processing exemption letter certifying the environmental controls are not for human occupancy will be obtained from a qualified Energy Consultant.) Depending on conditions, it may take from 5-10 days for cannabis to properly dry and cure. All work surfaces and equipment used for drying shall be maintained in a clean and sanitary condition. The building will be locked when immediate access is not required.

### 4.4. PROCESSING/ PROCESSING PLAN

#### 4.4.1. FACILITY & LOCATION

This is proposed as a Cannabis Support Facility (as defined by CCLUO 2.0) for processing of off-site cannabis, as well as cannabis produced on-site. An ADA-accessible commercial building with an approximate footprint of 3,000 sf will be constructed for processing and packaging activities.

Processing, trimming, weighing, and packaging will occupy ~2,100 sf. Please see the Site Plan for building location and the associated draft building floorplan.

The building will also house an employee breakroom, kitchen, ADA-compliant restroom with shower, additional restroom, a small office, and appurtenant storage areas for supplies and refuse/recycling. The building will have associated permitted electricity supplied by grid power, a permitted OWTS, and ample parking, including an ADA space.

#### 4.4.2. OPERATIONS

All necessary processing and packaging activities will occur on-site by employees or contractors of the Applicant. Trimming and packaging activities will occur for cannabis produced off-site, on-site, and may also occur for cannabis produced from the Applicant's associated other nearby cultivation sites. As a Cannabis Support Facility, processing will also occur for other farms' products, according to their specifications. If product is to be bucked and trimmed, these activities will occur in the designated space in the commercial processing building. Trimming will be done by hand and/or using automated trimming machines. After trimming, employees shall perform all additional processing and packaging activities in the designated space in the processing building. Additional processing includes creation of non-manufactured cannabis products, such as cannabis cigarettes. All work surfaces and equipment used for processing and packaging shall be maintained in a clean and sanitary condition, and PPE (e.g. dust masks, gloves) shall be provided for employee use.

#### 4.5. TRANSPORT-ONLY SELF DISTRIBUTION

The Applicant intends to obtain licensure from the state for Transport-Only Self Distribution. This will allow the following activities necessary for farm and business operations:

- transport of clones and immature plants from the commercial nursery to each on-site cultivation license within canopy areas
- transport of clones and immature plants from the commercial wholesale nursery to other farms
- transport of harvested cannabis from each cultivation license canopy area to on-site consolidated drying facility (4 drying buildings) and processing facility (1 building)
- transport of fresh, bucked, or trimmed cannabis, bulk plant material ("trim"), and non-manufactured cannabis products to other distributors and/or manufacturers

Only products produced by the Applicant on-site will be transported under the self distribution license. The Applicant will not charge a fee for transport of such products. As activities are of a transport-only nature, no physical structure is required for self-distribution activities, other than an area designated for records storage, which shall be the proposed office within the processing building.

## 5. SCHEDULE OF ACTIVITIES

### 5.1. TIMELINE

As the proposed Project contains many elements, a phase-in approach is anticipated for implementation. The initial year (Year 1) of permit approval is expected to be 2022. From this time, the Applicant anticipates a 5-year implementation period until all Project activities are at full-capacity. The implementation schedule is also dependent on when sufficient grid-power becomes available at the site (and in the Petrolia area, in general). The current PG&E wait time for necessary power for full capacity is 4-6 years.

#### YEAR 1

10,000 sf of cultivation in greenhouses (GH-1) using light-dep methodology

43,560 sf (1 acre) of full-sun outdoor cultivation

2 nursery greenhouses (5,040 sf; CN-2)

Water storage: pond, plastic tanks, fire tank/s

Drying & processing: off-site at Applicant's other related facilities

#### Year 2

Add 10,000 sf light-dep cultivation (20,000 sf total; GH-1)

Add 1 acre full-sun outdoor cultivation (2 ac total)

Add 2 nursery greenhouses (4 total, 10,080 sf; CN-2)

Add 1 nursery building (3,000 sf; CN-3)

Add 1 drying building (4,800 sf)

#### Year 3

Add 10,000 sf light-dep cultivation (30,000 sf total; GH-1)

Add 1 acre full-sun outdoor cultivation (3 ac total)

Add 4 nursery greenhouses (20,160 sf total; CN-2)

Add 1 drying building (2 total)

Add processing building (3,000 sf)

#### Year 4

Add 13,560 sf light-dep cultivation (43,560 sf total; GH-1)

Add 2 nursery greenhouses (25,200 sf total; CN-2)

Add 1 drying buildings (3 total)

Add 2 employee housing units

## Year 5

Add gutter-connect greenhouses: 43,560 sf mixed-light cultivation (ML-1)

Add gutter-connect greenhouses: 21,440 sf nursery (CN-1)

Add 6 nursery greenhouses (40,320 sf total; CN-2)

Add 1 nursery building (2 total; CN-3)

Add 2 employee housing units (4 total)

5.2. CALENDAR OF ACTIVITIES

Table 8. Calendar of All Cannabis Activities for CISCO FARMS INC. on APN 105-101-011 et al.

Component	Description of Activity	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Commercial Nursery (CN)	Maintenance of mother plants												
	Cutting, propagation, sale of clones & juvenile plants												
Mixed-light Cultivation (ML)	Cloning & nursery activities												
	Plant, veg & flowering in canopy area												
	Harvest												
Light-dep Greenhouse Cultivation (GH)	Cloning & nursery activities												
	Plant, veg & flowering in canopy area												
	Harvest												
Full-sun Outdoor Cultivation (OD)	Cloning & nursery activities												
	Plant, veg & flowering in canopy area												
	Harvest												
Processing (P)	Drying												
	Trimming & packaging												
Transport-Only Self Distribution (D)	Transport clones & juvenile plants to on-site canopy areas & customers												
	Transport cannabis products to processing & distributors												
Site Maintenance (S)	Irrigation & water system monitoring												
	Invasive species monitoring & mgmt												
	Winterization												
	Drainage features maintenance & monitoring												

### 5.3. DETAILED SCHEDULE OF ACTIVITIES

#### JANUARY

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
ML: clone cutting  
ML: juvenile plant veg & maintenance  
GH: clone cutting  
GH: juvenile plant veg & maintenance  
P: trim FS; trim other farms' cannabis  
D: transport clones to customers  
D: transport on-site cannabis material to other distributors/manufacturers  
S: water system & drainage feature monitoring & maintenance

#### FEBRUARY

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
ML: clone cutting  
ML: juvenile plant veg & maintenance  
GH: juvenile plant veg & maintenance  
OD: clone cutting, propagation  
P: trim other farms' cannabis  
D: transport clones & juvenile plants to customers  
D: transport on-site cannabis material to other distributors/manufacturers  
S: water system & drainage feature monitoring & maintenance  
S: invasive plant monitoring & maintenance

#### MARCH

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
ML: juvenile plant veg & maintenance  
GH: clone cutting  
GH: juvenile plant veg & maintenance  
OD: juvenile plant veg & maintenance  
P: trim other farms' cannabis  
D: transport clones & juvenile plants to customers  
D: transport on-site cannabis material to other distributors/manufacturers  
S: water system & drainage feature monitoring & maintenance

#### APRIL

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
ML: clone cutting  
ML: juvenile plant veg & maintenance  
ML: plant 1<sup>st</sup> round  
ML: veg, flowering & maintenance  
GH: juvenile plant veg & maintenance  
GH: plant 1<sup>st</sup> round  
GH: veg, flowering & maintenance  
OD: juvenile plant veg & maintenance  
P: trim other farms' cannabis  
D: transport clones & juvenile plants to customers  
D: transport juvenile plants to canopy areas  
D: transport on-site cannabis material to other distributors/manufacturers  
S: water system monitoring & maintenance

## MAY

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
ML: juvenile plant veg & maintenance  
ML: harvest 1<sup>st</sup> round  
ML: plant 2<sup>nd</sup> round  
ML: veg, flowering & maintenance  
GH: clone cutting  
GH: juvenile plant veg & maintenance  
GH: veg, flowering & maintenance  
OD: juvenile plant veg & maintenance  
OD: plant out  
OD: veg & maintenance  
P: dry ML 1<sup>st</sup> round; trim other farms' cannabis  
D: transport clones & juvenile plants to customers  
D: transport juvenile plants to canopy areas  
D: transport on-site cannabis material to drying/processing & other distributors/manufacturers  
S: water system monitoring & maintenance  
S: Bullfrog detection/monitoring surveys

## JUNE

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
ML: juvenile plant veg & maintenance  
ML: veg, flowering & maintenance  
GH: juvenile plant veg & maintenance  
GH: harvest 1<sup>st</sup> round  
GH: plant 2<sup>nd</sup> round  
GH: veg, flowering & maintenance  
OD: veg & maintenance  
P: dry & trim ML 1<sup>st</sup> round & GH 1<sup>st</sup> round  
D: transport clones & juvenile plants to customers  
D: transport juvenile plants to canopy areas  
D: transport on-site cannabis material to drying/processing & other distributors/manufacturers  
S: water system monitoring & maintenance  
S: Bullfrog detection/monitoring surveys

## JULY

CN: mother plant veg & maintenance  
CN: Clone cutting, propagation  
CN: juvenile plant veg & maintenance  
ML: juvenile plant veg & maintenance  
ML: harvest 2<sup>nd</sup> round  
ML: plant 3<sup>rd</sup> round  
ML: veg, flowering & maintenance  
GH: juvenile plant veg & maintenance  
GH: flowering & maintenance  
OD: veg & maintenance  
P: trim GH 1<sup>st</sup> round; dry & trim ML 2<sup>nd</sup> round  
D: transport clones & juvenile plants to customers  
D: transport juvenile plants to canopy areas  
D: transport on-site cannabis material to drying/processing & other distributors/manufacturers  
S: water system monitoring & maintenance

## AUGUST

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
ML: veg, flowering & maintenance  
GH: harvest 2<sup>nd</sup> round  
GH: plant 3<sup>rd</sup> round  
GH: veg, flowering & maintenance  
OD: veg, flowering & maintenance  
P: trim ML 2<sup>nd</sup> round; dry & trim GH 2<sup>nd</sup> round  
D: transport clones & juvenile plants to customers  
D: transport juvenile plants to canopy areas  
D: transport on-site cannabis material to drying/processing & other distributors/manufacturers  
S: water system monitoring & maintenance

## SEPTEMBER

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
ML: flowering & maintenance  
ML: harvest 3<sup>rd</sup> round  
ML: flowering & maintenance  
GH: flowering & maintenance  
GH: harvest 3<sup>rd</sup> round  
OD: flowering & maintenance  
P: trim GH 2<sup>nd</sup> round; dry ML 3<sup>rd</sup> round & GH 3<sup>rd</sup> round  
D: transport clones & juvenile plants to customers  
D: transport on-site cannabis material to drying/processing & other distributors/manufacturers  
S: water system monitoring & maintenance

## OCTOBER

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
OD: harvest  
P: trim ML 3<sup>rd</sup> round & GH 3<sup>rd</sup> round; dry OD  
D: transport clones to customers  
D: transport on-site cannabis material to drying/processing & other distributors/manufacturers  
S: water system & drainage feature monitoring & maintenance  
S: Bullfrog eradication/pond draining (if necessary)  
S: winterization – cover crop, stow cultivation supplies, cover soil piles, apply native seed mix to bare areas, mulch

## NOVEMBER

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
OD: harvest  
P: dry & trim OD; trim other farms' cannabis  
D: transport clones to customers  
D: transport on-site cannabis material to drying/processing & other distributors/manufacturers  
S: water system & drainage feature monitoring & maintenance  
S: winterization – cover crop, stow cultivation supplies, cover soil piles, apply native seed mix to bare areas, mulch

## DECEMBER

CN: mother plant veg & maintenance  
CN: clone cutting, propagation  
CN: juvenile plant veg & maintenance  
P: trim OD; trim other farms' cannabis  
D: transport clones to customers  
D: transport on-site cannabis material to other distributors/manufacturers  
S: water system & drainage feature monitoring & maintenance

#### 5.4. HOURS OF OPERATION

Activities will take place at the Project site between 7:00 AM – 8:00 PM, 7 days per week, year-round.

### 6. EMPLOYEES

A total of 34 employees will be hired and/or contracted for the project. Twelve (12) employees will be employed full-time year-round: 4 managers and 8 laborers/farmworkers. It is anticipated that an additional 22 persons will be hired during peak times (e.g. weeks when harvesting, planting, and processing are concurrent). Table 9, below, provides a general breakdown of employees by cannabis activity and employee classification, although it is expected that fluidity will exist between which laborers are assigned to which activity and at what time during the year. Seasonal and/or contracted labor will be hired during peak times, which occur at regular intervals between May – December, depending on the season’s planting and harvesting schedule. Non-peak times are January – April, when only managers and year-round laborers will be employed. Up to 8 employees may live on-site as the Project is currently proposed; additional employees will live off-site and commute daily to the Project site.

**Table 9. Employees by Activity and Classification for CISCO FARMS INC. on APN 105-101-011 et al.**

ACTIVITY	MANAGERS	YEAR-ROUND LABORERS	SEASONAL / CONTRACT LABOR
Nursery (all)	1	2	4
Cultivation	1	6	10
Processing	1	-	8
Maintenance	1	-	0
<i>Classification Subtotal</i>	4	8	22
<b>TOTAL EMPLOYEES</b>		<b>34</b>	

#### 6.1. EMPLOYEE SAFETY PRACTICES

Cultivation, harvesting, and processing will be performed by employees specifically trained in each activity, including techniques and use of pruning tools, and proper application and storage of pesticides and fertilizers. Applicable PPE shall be employed when handling agricultural chemicals, during routine garden activities, processing, and manufacturing. Any and all employees will be provided PPE free of charge. All PPE will be stored on designated shelves and/or bins within the employee break room or in adjacent storage areas. As required by law, these locations are separate from the locked agricultural chemicals storage areas.

The Applicant shall utilize proper safety procedures including fire safety, use of rubber (or similar material) gloves and respirators (if applicable), proper hand washing guidelines, and emergency protocols. Contact information for the local fire department, CalFIRE, Humboldt County Sheriff, and Poison Control will be posted within the employee break room in plain view and/or at the employee restrooms, and at each area where agricultural chemicals are stored. A written copy of emergency procedures and contact information will be kept on site and also provided to each employee. The material safety data sheets (MSDS) for all chemicals and compounds will be kept on site, updated monthly (if necessary), and accessible to employees. All work performed will follow Cal-OSHA standard practices.

The Applicant and its employees and contractors shall comply with CDC, Cal-OSHA, and Humboldt County DPH COVID-19 and/or other emergency outbreak safety procedures that are current at the time of operation. On-site personnel shall be limited to the minimum required number for task completion each working day.

## 6.2. EMPLOYEE SANITATION & HYDRATION

Restroom and hand washing facilities will be available for employee use. It is estimated that an extra 50 gallons per day maximum will be generated from these uses during the peak times. The septic system will be designed to accommodate this amount. Drinking water shall be sourced from the on-site well and available from the sink in the employee break room, restroom, and external taps/spigots.

To limit the possibility of spread of COVID-19 and other infectious diseases, and to comply with basic sanitation procedures, employees shall be required to wash their hands after using the restroom, and prior to and after consuming food. Employees involved in processing operations will also be required to wash their hands after arriving to the site and coughing or sneezing. In addition to the washing facilities, hand sanitizer will be available in the processing room, break room, drying room/s, kitchen, and restroom facilities.

## 6.3. ON-SITE HOUSING

### 6.3.1. FACILITY DESCRIPTION

Four (4) modular housing units will be located on-site for housing up to 8 employees / farmworkers-in-residence. Housing is proposed as pre-fabricated modular units, or similar structures. Exact number, dimensions, and specifics of the housing units have yet to be determined, but will be based on units that are made for the agricultural industry. All housing shall comply with Federal H-2A Housing Regulations (20 CFR § 654.404 – 654.417), any and all state requirements, such as CCR Title 25, Div.1, Chpt.1, Subchpt.3, building standards published

in the State Building Standards Code relating to labor camps, DOL OSHA standards regarding environmental controls set forth in 29 CFR 1910.142, and other applicable regulations.

The location of the housing units on the Site Plan is approximate, and floorplans included as part of this application are for example purposes only. Final building plans will be submitted to the Building Department for approval upon receipt of cannabis permits. The Applicant will also comply with any County requirements and will obtain all necessary local and state permits to operate said housing (HSC §17030).

Drinking and domestic water for the units shall be supplied by the proposed on-site well and all units will be serviced by an OWTS. Electricity will be provided by grid power and/or a small solar array.

#### 6.3.2. OPERATIONS

The Applicant will perform routine maintenance, maintain dwellings to code, renew permits annually, inspect, keep records and submit reports, agree to annual CA Department of Housing & Community Development (HCD) inspections, and comply with all portions of CCR HSC §1700-170062.5, better known as the Employee Housing Act.