

**RESOLUTION OF THE PLANNING COMMISSION
OF THE COUNTY OF HUMBOLDT**

Resolution Number 24-007

Record Number PLN-2022-17880

Assessor's Parcel Numbers: 511-141-015

Resolution by the Planning Commission of the County of Humboldt certifying compliance with the California Environmental Quality Act and conditionally approves ECD Holdings, Inc Conditional Use Permit

WHEREAS, ECD Holdings, Inc provided an application and evidence in support of approving 33,560 square feet of new mixed light commercial cannabis cultivation and associated accessory uses; and

WHEREAS, the lead agency, prepared an Addendum to the Final Environmental Impact Report (EIR) prepared for the Commercial Cannabis Land Use Ordinance adopted by the Humboldt County Board of Supervisors on May 8, 2018. The proposed project does not present substantial changes that would require major revisions to the previous EIR. No new information of substantial importance that was not known and could not be known at the time was presented as described by §15162(c) of CEQA Guidelines; and

WHEREAS, the Humboldt County Planning Commission held a duly-noticed public hearing on March 7, 2024 and reviewed, considered, and discussed the application for a Conditional Use Permit and reviewed and considered all evidence and testimony presented at the hearing.

Now, THEREFORE BE IT RESOLVED, that the Planning Commission makes all the following findings:

1. FINDING:

Project Description: A Conditional Use Permit to add 33,560 square feet of new mixed light commercial cannabis cultivation to an approved project in the McKinleyville Community Planning Area. If approved, the total cultivation will be 43,560 square feet of mixed light cultivation. Accessory nursery space will increase to 4,350 square feet. The site will be reconfigured to consolidate operations. The proposed irrigation sources are a well, rainwater catchment, and water recapture. The previously approved spring will no longer be used for cannabis irrigation. Annual water usage will increase from 120,000 gallons to a total of 610,000 gallons. Existing water storage is 110,000 gallons. Previously approved onsite processing will continue. Electricity is sourced from PGE through an eligible renewable energy program with a generator for emergencies only.

EVIDENCE: a) Project File: PLN-2022-17880

2. FINDING: **CEQA:** The project complies with the requirements of the California Environmental Quality Act. The Humboldt County Planning Commission has considered the Environmental Impact Report previously adopted for the Commercial Cannabis Land Use Ordinance as well as the Addendum to the Environmental Impact Report that was prepared for the ECD Holdings Inc project pursuant to Section 15164 of the CEQA guidelines.

EVIDENCE:

- a) Addendum Prepared for the proposed project.
- b) The proposed project does not present substantial changes that would require major revisions to the previous Final Environmental Impact Report. No new information of substantial importance that was not known and could not be known at the time was presented as described by §15162(c) of CEQA Guidelines.
- c) A biological and botanical report concluded there would not be a significant impact.
- d) The parcel takes access from a private road from a county-maintained road which is functionally equivalent to Category 4 standard.
- e) A well evaluation concluded that there will likely be no impact to water resources or neighboring wells.
- f) A rainwater collection and water reclamation analysis found that adequate water can be collected for irrigation even in low rainfall years.
- g) A noise assessment and mitigation plan will subject the project to noise performance standards.
- h) Energy will be provided through an eligible renewable energy program.
- i) A Cultural Resource Investigation concluded there are no historic resources present.

FINDINGS FOR CONDITIONAL USE PERMIT

3. FINDING: The proposed development is in conformance with the County General Plan, Open Space Plan, and the Open Space Action Program.

EVIDENCE:

- a) General agriculture is a use type permitted in the Residential Agriculture (RA) land use designation. The proposed cannabis cultivation, an agricultural product, is within land planned and zoned

for agricultural purposes, consistent with the use of Open Space land for managed production of resources. The use of an agricultural parcel for commercial agriculture is consistent with the Open Space Plan and Open Space Action Program. Therefore, the project is consistent with and complimentary to the Open Space Plan and its Open Space Action Program.

- 4. FINDING:** The proposed development is consistent with the purposes of the existing Agriculture General (AG) zone in which the site is located.

EVIDENCE: a) General agricultural uses are principally permitted in AG zone.

b) The location of all project elements meets the setback requirements for the AG zone.

- 5. FINDING:** The proposed development is consistent with the requirements of the CCLUO provisions of the Zoning Ordinance.

EVIDENCE: a) The CCLUO allows existing cannabis cultivation to be permitted in areas zoned AG (HCC 314-55.4.6.1.1).

b) The parcel was legally created through an approved subdivision (Parcel Map 138 Parcel Map Book 2 Page 45, recorded on April 10, 1972)

c) The project will obtain water from reclaimed water, rainwater catchment, and a ground water well which are eligible water sources.

d) The parcel is accessed from a private road that an Engineer has evaluated to be equivalent to Category 4.

e) No timber conversion will occur.

f) The proposed cultivation will take place in an area of slopes 15% or less.

g) Coverage of prime soils by the proposed project is approximately 6% which is below the 20% maximum allowed under the CCLUO.

h) The location of the cultivation complies with the setbacks required in Section 314-55.4.6.4.4.

i) Energy is provided by PGE through an eligible renewable energy program.

6. FINDING: The commercial cannabis cultivation and the conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the vicinity.

- EVIDENCE:**
- a) The site is located off a road determined to be equivalent to a road category 4 by an Engineer.
 - b) The proposed project will not be in a location where there is an established neighborhood or other sensitive receptor such as a school, church, park, or other use which may be sensitive to cannabis cultivation. Continuing cultivation on this site will not change the character of the area due to the historic and current uses in the area.
 - c) The location of the proposed cannabis cultivation is more than 300 feet from the nearest off-site residence.
 - d) Irrigation water is sourced from reclaimed water, rainwater catchment, and a well that has been determined to likely be disconnected from surface water and nearby wells.
 - e) Provisions have been made in the applicant's proposal to protect water quality and thus runoff to adjacent property and infiltration of water to groundwater resources will not be affected.
 - f) The project is subject to specific limits on noise at the property line.
 - g) The project is subject to Dark Sky standards for light pollution.

7. FINDING: The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

- EVIDENCE:**
- a) The parcel was not included in the housing inventory of Humboldt County's 2019 Housing Element but does have the potential to support one housing unit. The approval of cannabis cultivation on this parcel will not conflict with the ability for a residence to be constructed on this parcel.

8. FINDING: Approval of this project is consistent with Humboldt County Board of Supervisors Resolution No. 18-43 which established a limit on the number of permits and acres which may be approved in each of the County's Planning Watersheds.

EVIDENCE: a) The project site is in the Mad River Watershed, which under Resolution 18-43 is limited to 334 permits and 115 acres of cultivation. With the approval of this project the total approved permits for cultivation in this Planning Watershed would be 74 permits and the total approved acres would be 27.67 acres of cultivation.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Humboldt County Planning Commission does hereby:

- Adopt the findings set forth in this resolution; and
- Conditionally approves the Conditional Use Permit for ECD Holdings, Inc subject to the conditions of approval attached hereto as Attachment 1.

Adopted after review and consideration of all the evidence on **March 7, 2024**.

The motion was made by COMMISSIONER Sarah West and second by COMMISSIONER Peggy O'Neill and the following ROLL CALL vote:

AYES: COMMISSIONERS: Sarah West, Peggy O'Neill, Iver Skavdal, Jerome Qiriaz, Thomas Mulder, Noah Levy
NOES: COMMISSIONERS:
ABSENT: COMMISSIONERS:
ABSTAIN: COMMISSIONERS: Lorna McFarlane
DECISION: Motion carried 6/0

I, John Ford, Secretary to the Planning Commission of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above-entitled matter by said Commission at a meeting held on the date noted above.



John Ford, Director
Planning and Building Department

CONDITIONS OF APPROVAL

APPROVAL OF THE CONDITIONAL USE PERMIT IS CONDITIONED ON THE FOLLOWING TERMS AND REQUIREMENTS.

A. Conditions that must be completed within specified time frames or completed prior to commencing cultivation.

1. Prior to commencing cultivation entitled by this Conditional Use Permit, the permittee shall:
 - a. Install metering devices to track water usage from all irrigation sources (e.g. reclaimed water, rainwater catchment, and the groundwater well). See also Condition of Approval B3.
 - b. Provide documentation to the satisfaction of the Planning and Building Department, that the recommendations contained in the Road Evaluation dated 10/4/2016 prepared by ATLAS Engineering have been implemented.
 - c. Install speed limit signs of five miles per hour at appropriate locations along Hooven Road and include speed limit restrictions as part of mandatory employee training. The permittee shall provide documentation to the satisfaction of the Planning and Building Department demonstrating the installation of the signs and the method of employee training.
 - d. Increase water storage to at least 116,000 gallons for the anticipated rainwater catchment. The 116,000 gallons of storage must be in addition to any other tanks or storage used for fire protection, fertigation, or water reclamation.
 - e. Provided a Water Storage and Use Plan for review and approval to the satisfaction of the Planning and Building department. At a minimum, the plan shall include:
 - i. A water use and collection schedule that details when and how much reclaimed water will be used for irrigation.
 - ii. The amount of water storage required for the proposed project, separated by water source type, i.e., reclaimed water, rainwater catchment and well. Water storage should include, but is not limited to, at least 116,000 gallons of water storage exclusively dedicated to rainwater catchment.
 - iii. The location(s) of water storage on site.
 - iv. A timeline outlining when water storage installation will be complete.
2. Within 60 days of the effective date of project approval, the permittee shall provide documentation demonstrating enrollment State Water Board General Order No. WQ 2019-0001-DWQ by providing a copy of the Notice of Applicability and a Site Management Plan.
3. Within 60 days of the effective date of project approval, the permittee shall execute and file with the Planning Division the statement titled, "Notice and Acknowledgment

regarding Agricultural Activities in Humboldt County,” (“Right to Farm” ordinance) as required by the HCC and available at the Planning and Building Department.

4. Within 60 days of the effective date of project approval, the permittee shall pay a conformance review deposit as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The permittee is responsible for costs for post-approval review for determining project conformance with conditions. Payment shall be made to the Humboldt County Planning Division, 3015 H Street, Eureka. Permit conformance with conditions must be demonstrated prior to release of building permit or initiation of use and at time of annual inspection.
5. Within 90 days of the effective date of project approval, or a mutually agreed upon time frame with the Planning and Building Department, the permittee shall provide an updated site plan. In addition to all required site plan elements, the revised site plan must correctly depict and label the intermittent stream identified on page 40 of the Botanical Report and Wetlands and Waters Determination and Delineation dated 9/30/2021 prepared by J. Regan Consulting. The updated site plan shall depict a streamside management area consistent with the County of Humboldt Streamside Management Area Ordinance using the riparian drip line as the origin of the setback. The revised site plan must also show the location and label all water storage tanks (see also Condition of Approval A.1.d to A.1.e).
6. Prior to any new construction, including building permits associated with the cannabis operations already approved but not yet constructed, the permittee shall follow the recommendations of the revised Biological Scoping Report dated June 20, 2022, prepared by Slauson Wildlife. Per recommendation seven on page six, the permittee shall conduct pre-construction diurnal raptor surveys on the proposed project parcel during the early nesting season (March-April-May) to determine if there are any active raptor nests within 300 ft of the proposed project if any proposed construction activities are to occur during the nesting season (15 March to 15 August). This includes actively searching for nesting structures within 300 ft of all proposed construction activity locations. If any active raptor nests are found within 300 ft of any proposed project activities, those activities will have to be conducted outside the nesting season (15 March to 15 August) or until the nest(s) can be confirmed to have successfully fledged the young or failed.
7. Prior to occupancy and use in the operation, adequate and appropriate odor mitigation equipment shall be installed in all structures used in the entire operation for cultivation, drying, or trimming.
8. Within one year of the effective date of project approval, the permittee shall develop and maintain areas of native plant species providing nectar resources, nesting and over wintering sites for bumblebees. Recommendation three on page five of the revised Biological Scoping Report dated June 20, 2022, prepared by Slauson Wildlife,

is incorporated herein by reference. The location shall be along the edges of the proposed project to provide habitat connectivity across the proposed project site for bumblebees. The area shall be equivalent to 10% of the proposed project footprint and be designed to provide habitat that allows bumblebees to move around or through the proposed project area. Plant species should include a mix of native perennial (e.g., rhododendron) and annual (e.g., sweat pea) species known to be important nectar plants.

9. Prior to commencing cultivation entitled by this Conditional Use Permit, the Permittee shall provide documentation to the satisfaction of the Planning and Building Department, demonstrating implementation of the recommendations contained in the February 23, 2024, Road Evaluation Report prepared by NorthPoint Consulting Group, Inc. Specifically, it must be shown that the maintenance is up to date and the improvements have been made as described for Road Points one through fourteen as stated on pages one through three in the report.
10. The applicant shall cause to be applied, at least twice a year, to the lower portion of Hooven Road an EPA approved substance to bind the road surface to minimize dust. Evidence of this application shall be provided at the time of the annual inspection.

B. General Conditions

1. The Permittee shall adhere to all previously adopted conditions of approval for cannabis entitlements on the property unless superseded by conditions in this Conditional Use Permit.
2. There shall be no interconnectivity between cannabis irrigation infrastructure and domestic water systems, nor shall there be connections to ineligible or unapproved water sources (e.g. point of diversion).
3. The water use for cultivation is limited to the use of the irrigation infrastructure described in the approved Operations Plan and Site Plan. The applicant will maintain monthly logs of water usage and make the logs available upon request. Monthly logs include photographing the meter reading monthly.
4. Upon request, the permittee shall provide documentation that electricity for all cannabis operations on the property are sourced through an eligible renewable energy program. The generator is reserved for emergency use only.
5. The Permittee shall attempt to form a Road Maintenance Association. In the absence of a Road Maintenance Association, the permittee shall pay a fair and proportional share of the cost of necessary road improvements and maintenance for Hooven Road. Additionally, the permittee shall implement the width and visibility maintenance recommendations described on page three of the Road System Assessment Report

dated April 2020 prepared by NorthPoint Consulting Group. The permittee shall also maintain all driveway and private road intersections (e.g. the intersection of Hooven Road and Dows Prairie Road) in accordance with County Code Section 341-1 (Sight Visibility Ordinance).

6. Building permit and agriculture exemption applications associated with the operation must provide documentation demonstrating that structures comply with airport approach zone building height limitations.
7. Cultivation area is limited to the proportion of irrigation water available for the growing season. If adequate water from reclamation and/or rainwater catchment is unavailable, the cultivation area must be proportionally reduced. Increasing the amount of water taken from the well above what is described in the staff report may not occur without permit modification.
8. Construction hours shall be limited to between the hours of 8:00 a.m. and 7:00 p.m. Monday through Friday, and between 9:00 and 7:00 p.m. on Saturdays. No heavy equipment or noise generating construction activities shall be allowed on Sundays or nationally recognized holidays.
9. The permittee must fully contain compost piles and imported soil and/or properly dispose of at a waste management facility.
10. A Notice of Determination (NOD) will be prepared and filed with the County Clerk for this project in accordance with the State CEQA Guidelines. The Department will file the NOD and the applicant is responsible for this cost to the project.
11. The applicant is responsible for obtaining all necessary County and State permits and licenses, and for meeting all requirements set forth by other regulatory agencies.
12. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding hazardous materials. A written verification of compliance shall be required before any provisional permits may be finalized. Ongoing proof of compliance with this condition shall be required at each annual inspection to keep the permit valid.
13. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Planning and Building Department will provide a bill to the applicant after the decision. All outstanding planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

C. Ongoing Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project

1. If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist and the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and the lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, ground-stone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to Public Resources Code (PRC) Section 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99.
2. The following noise standards shall be followed:
 - a. The combination of background, generator and greenhouse fan or other operational equipment created noise must not result in the harassment of Northern Spotted Owl species as required to meet the performance standards for noise set by Department Policy Statement No. 16-005. The combined noise levels measured at 100 feet or the edge of habitat, whichever is closer, shall be at or below 50 decibels. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service, and further consultation where necessary. A building permit shall be obtained should any structures be necessary for noise attenuation.
 - b. The following noise limits are required at the property line as follows:
 - i. 36.6 dB at the eastern property line; and
 - ii. 51.8 dB at the southern property line; and
 - iii. 55.5 dB at the western property line; and
 - iv. 43.9 dB at the northern property line.
 - c. If more than one noise standard applies (e.g. generator and property line) then the more restrictive standard shall be used.
3. All artificial lighting shall be fully contained within structures such that no light escapes (e.g., through blackout curtains). Structures shall be shielded between 30 minutes prior to sunset and 30 minutes after sunrise to prevent disruption to crepuscular wildlife. Security lighting shall be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program. Standards include but are not limited to the following, 1) light shall be shielded and downward facing, 2) shall consist of low-pressure sodium light or low spectrum light

emitting diodes with a color temperature of 3000 kelvins or less and 3) only placed where needed.

4. Should the Humboldt County Planning Division receive complaints that lighting or noise is not complying with the standards listed above in this permit, within ten (10) working days of receiving written notification that a complaint has been filed, the applicant shall submit written verification that the light shielding and alignment, and noise levels have been repaired, inspected, and corrected as necessary.
5. The use of synthetic or monofilament (e.g. plastic or nylon) netting for all uses, including but not limited to erosion control, shall be prohibited. The prohibition includes biodegradable plastic netting. Geotextiles, fiber rolls, and other erosion control measure materials shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves to minimize the risk of ensnaring and strangling wildlife.
6. All refuse shall be contained in wildlife proof containers, always, and relocated to an authorized waste management facility, in compliance with State and local laws, on a regular and on-going basis.
7. Should any wildlife be encountered during work activities, the wildlife shall not be disturbed and be allowed to leave the work site unharmed.
8. The use of anticoagulant rodenticide is prohibited. Per the recommendations appearing on pages five through seven of the revised Biological Scoping Report dated June 20, 2022, prepared by Slauson Wildlife, the use of pesticides and herbicides are also prohibited.
9. The permittee shall implement the invasive species control plan described in section 3.3 of the approved Operations Plan. The operational area shall be surveyed and maintained at a minimum of twice a year.
10. The operator shall provide information to all employees about the potential health impacts of cannabis use on children. Information shall be provided by posting the brochures from the Department of Health and Human Services titled "Cannabis Palm Card" and "Cannabis Rack Card." This information shall also be provided to all employees as part of the employee orientation.
11. All components of the project shall be developed, operated, and maintained in conformance with the Project Description, the approved Site Plan, the Plan of Operations, the CMMLUO, and these conditions of approval.
12. If operating pursuant to a written approved compliance agreement, permittee shall abate or cure violations at the earliest feasible date, but in no event no more than two

(2) years from the date of issuance of a provisional clearance or permit. Permittee shall provide plans for curing such violations to the Planning and Building Department within one (1) year of issuance of the provisional clearance or permit. If good faith effort toward compliance can be shown within the two years following the issuance of the provisional clearance or permit, the Department may, at the discretion of the Director, provide for extensions of the provisional permit to allow additional time to meet the outstanding requirements.

13. Compliance with all statutes, regulations, and requirements of the California State Water Resources Control Board and the Division of Water Rights, at a minimum to include a statement of diversion of surface water from a stream, river, underground stream, or other watercourse required by Water Code Section 5101, or other applicable permit, license, or registration, as applicable.
14. Confinement of the area of cannabis cultivation, processing, manufacture, or distribution to the locations depicted on the approved site plan. The commercial cannabis activity shall be set back at least 30 feet from any property line, and 600 feet from any school, school bus stop, church or other place of religious worship, or tribal cultural resources, except where a reduction to this setback has been approved pursuant to Section 55.4.11(d).
15. Applicant must adhere to and implement the Site Management Plan. A copy of the reporting form portion of the Mitigation and Reporting Program (MRP) shall be submitted to the Planning and Building Department upon request.
16. Applicant must demonstrate and maintain enrollment in Tier 1 or 2 in accordance with State Water Resources Control Board Order No. WQ 2019-0001-DWQ, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency.
17. Comply with the terms of any applicable Lake and Stream Alteration (1600 or 1602) Agreement obtained from the California Department of Fish and Wildlife (CDFW).
18. Comply with the terms of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (Cal Fire), if applicable.
19. Consent to an annual on-site compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday through Friday, 9:00 a.m. to 5:00 p.m., excluding holidays).
20. Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.

21. Pay all applicable application, review for conformance with conditions and annual inspection fees.
22. Fuel shall be stored and handled in compliance with applicable state and local laws and regulations, including the County of Humboldt's Certified Unified Program Agency (CUPA) program, and in such a way that no spillage occurs.
23. The master logbooks maintained by the applicant to track production and sales shall be maintained for inspection by the County.
24. Pay all applicable taxes as required by the Humboldt County Commercial Marijuana Cultivation Tax Ordinance (Humboldt County Code Section 719-1 et seq.).

Performance Standards for Cultivation and Processing Operations

25. Pursuant to Business and Professions Code section 26051.5(a)(8), an applicant seeking a cultivation license shall "provide a statement declaring the applicant 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), to the extent not prohibited by law."
26. Cultivators shall comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, which may include federal and state wage and hour laws, Cal/OSHA, OSHA, the California Agricultural Labor Relations Act, and the Humboldt County Code (including the Building Code).
27. Cultivators engaged in processing shall comply with the following Processing Practices:
 - a. Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment.
 - b. Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis.
 - c. Employees handling cannabis in processing operations must have access to facemasks and gloves in good operable condition as applicable to their job function.
 - d. Employees must wash hands sufficiently when handling cannabis or use gloves.
28. All persons hiring employees to engage in commercial cannabis cultivation and processing shall comply with the following Employee Safety Practices:

- a. Cultivation operations and processing operations must implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:
 - (1) Emergency action response planning as necessary;
 - (2) Employee accident reporting and investigation policies;
 - (3) Fire prevention;
 - (4) Hazard communication policies, including maintenance of material safety data sheets (MSDS);
 - (5) Materials handling policies;
 - (6) Job hazard analyses; and
 - (7) Personal protective equipment policies, including respiratory protection.
 - b. Cultivation operations and processing operations must visibly post and maintain an emergency contact list which includes at a minimum:
 - (1) Operation manager contacts;
 - (2) Emergency responder contacts; and
 - (3) Poison control contacts.
 - c. At all times, employees shall have access to safe drinking water and toilets and handwashing facilities that comply with applicable federal, state, and local laws and regulations. Plumbing facilities and water source must be capable of handling increased usage without adverse consequences to neighboring properties or the environment.
 - d. On site-housing provided to employees shall comply with all applicable federal, state, and local laws and regulations.
29. All cultivators shall comply with the approved processing plan as to the following:
- a. Processing practices
 - b. Location where processing will occur
 - c. Number of employees, if any
 - d. Employee Safety Practices
 - e. Toilet and handwashing facilities
 - f. Plumbing and/or septic system and whether or not the system is capable of handling increased usage
 - g. Drinking water for employees
 - h. Plan to minimize impact from increased road use resulting from processing
 - i. On-site housing, if any
30. Term of Commercial Cannabis Activity Permit. Any Commercial Cannabis Cultivation permit issued pursuant to the CMMLUO or CCLUO shall expire one (1) year after date of issuance, and on the anniversary date of such issuance each year thereafter, unless an annual compliance inspection has been conducted and the permittees and the permitted site have been found to comply with all conditions of approval.

31. Inspections. If the inspector or other County official determines that the permittees or site do not comply with the conditions of approval, the inspector shall serve the permit holder with a written statement identifying the items not in compliance, and the action that the permit holder may take to cure the noncompliance or file an appeal within ten (10) days of the date that the written statement is delivered to the permit holder. Personal delivery or mailing the written statement to the mailing address listed on the application by regular mail, plus three (3) days after date of mailing, shall constitute delivery. The permit holder may request a reinspection to determine whether or not the permit holder has cured all issues of noncompliance. Failure to request reinspection or to cure any items of noncompliance shall terminate the Permit, immediately upon the expiration of any appeal period, or final determination of the appeal if an appeal has been timely filed.

The permit holder and subject property owner are to allow the County or representative(s) or designee(s) to make inspections at any reasonable time deemed necessary to assure that the activities being performed under the authority of this permit are in accordance with the terms and conditions prescribed herein.

32. Permit Renewals to Comply with Updated Laws and Regulations. Permit renewal is subject to the laws and regulations effective at the time of renewal, which may be substantially different than the regulations currently in place and may require the submittal of additional information to ensure that new standards are met.
33. Acknowledgements to Remain in Full Force and Effect. Permittee acknowledges that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this section in the event that environmental conditions, such as a sustained drought or low flows in the watershed in which the cultivation area is located, will not support diversions for irrigation.
34. Transfers. Transfer of any leases or permits approved by this project is subject to the review and approval of the Planning Director for conformance with CMMLUO eligibility requirements and agreement to permit terms and acknowledgments. The fee for required permit transfer review shall accompany the request. The request shall include the following information:
- a. Identifying information for the new owner(s) and management as required in an initial permit application;
 - b. A written acknowledgment by the new owner in accordance as required for the initial permit application;
 - c. The specific date on which the transfer is to occur;
 - d. Acknowledgement of full responsibility for complying with the existing permit; and
 - e. Execution of an Affidavit of Non-diversion of Medical Cannabis.

Informational Notes:

1. None



ECD HOLDINGS, INC
APN: 511-141-015
CULTIVATION AND OPERATIONS MANUAL
HUMBOLDT COUNTY, CA

COMMERCIAL CANNABIS
CULTIVATION FACILITIES

PREPARED FOR:



March 2023

Commercial Cannabis Cultivation Facilities
APN: 511-141-015

Lead Agency:

Humboldt County Planning Department
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In Consultation with:

ECD Holdings, Inc
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March 2023

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APPENDIX E: DEHUMIDIFIER SPECIFICATIONS

1. PROJECT SUMMARY

1.1. PROJECT OBJECTIVE

ECD Holdings, Inc is proposing to permit commercial cannabis cultivation activities in accordance with the County of Humboldt's (County) *Commercial Cannabis Land Use Ordinance* (CCLUO), aka "Ordinance 2.0" on APN 511-141-015 in McKinleyville, California. The project requires a Conditional Use Permit for the expansion of 33,560 sq. ft. of new mixed light cannabis cultivation for a total of 43,560 sq. ft. in the McKinleyville Community Planning Area (CPA). The proposal includes the reorganization of the existing 10,000 sq. ft. of mixed light cultivation. An on-site nursery is proposed which will only be used for on-site facilities. The project includes the permitting of proposed facilities appurtenant to cultivation, including the proposed greenhouses for cultivation and nursery and a proposed 60'x80' metal building for drying and curing cannabis.

The existing site conditions include a residence, an approved Special Permit (PLN-10568-SP) for 4,400 sq. ft. of indoor cultivation, and an approved Zoning Clearance Certificate (PLN-10566-ZCC) for 10,000 sq. ft. of mixed light cultivation. The existing metal shop is permitted as a commercial facility and will be used for drying, storage, trimming, and packaging. The metal shop has an existing approved on-site wastewater treatment system that will provide restroom and hand washing facilities.

The site is served by PG&E. Water for the new cultivation is provided by a combination of reclaimed water from dehumidification and air conditioning units, rainwater collection, and an existing groundwater well. The spring diversion will cease to be used for cannabis cultivation and will be solely used for domestic purposes associated with the existing residence.

1.2. SITE DESCRIPTION

The project site is located on APN 511-141-015 near the community of McKinleyville (40.9685, -124.0853) in the Luffenholtz Creek-Frontal Pacific Ocean (HUC-12 #180101020503). The subject property has historically been used for residential, agricultural, and existing cannabis cultivation. The property is developed with a residence. Slopes on the property range from 5% to 25%; all project development would occur on areas of less than 15% slope. The project site occupies an area of approximately 15.95-acres, outside the Coastal Zone and within a State Responsibility Area (SRA) for fire protection. Approximately 627,264 sq. ft. (+/- 14.4 acres) of Prime Agricultural Soils exist on the property, per Humboldt County Web GIS. The existing and proposed cannabis cultivation activities total approximately 63,000 sq. ft. (1.44 acres) and would occur on the Prime Agricultural Soils.

1.3. LAND USE

The property is zoned Agriculture General (AG-B-5(10))-AP and has a general plan land use designation of Rural Residential (RA5-20). Land uses surrounding the parcel are comprised of 10- to 100-acre parcels with residential, agriculture, and timber uses.

1.4. STATE AND LOCAL COMPLIANCE

1.4.1. DEPARTMENT OF CANNABIS CONTROL – CALCANNABIS

ECD Holdings, Inc has obtained a Commercial Cannabis Activity license from the State of California for existing cannabis activities and will obtain new licenses for the proposed expansion once local approval has been received.

1.4.2. STATE WATER RESOURCES CONTROL BOARD – WATER RIGHTS

Project water is to be sourced from rainwater catchment, recaptured/recycled water sourced from dehumidifier and air-conditioning units, and an existing groundwater well. The proposed project does

not require water rights or permitting from the State Water Resources Control Board (SWRCB). No diversionary water source is proposed for this project.

There is an existing SIUR for surface water diversion (SIUR# H500465) that meets regulatory compliance through the State Water Resources Control Board, however, on approval of this project, the surface water diversion will cease for cannabis cultivation.

1.4.3. STATE WATER RESOURCES CONTROL BOARD AND NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD – WATER QUALITY

The applicant has enrolled for coverage as Tier 1, Low Risk (WDID:1-12CC400519) under the SWRCB General Order WQ 2019-0001-DWQ *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Dischargers of Waste Associated with Cannabis Cultivation Activities Order*). The purpose of the SWRCB Order is to implement the requirements for waste discharges associated with cannabis cultivation as described in SWRCB's *Cannabis Cultivation Policy – Principles and Guidelines for Cannabis Cultivation* ("Policy"). Prior to the commencement of cultivation operations, a Site Management Plan will be developed for the property to describe how the discharger is complying with the applicable Best Practicable Treatment or Control (BPTC) Measures listed in Attachment A of the Order/Policy.

The Tier 1, Low Risk discharger status reflects current operations that disturb less than one acre. The applicant's proposal will keep all cultivation activities out of riparian setbacks to maintain Low Risk status with SWRCB.

1.4.4. HUMBOLDT COUNTY BUILDING DEPARTMENT

Upon project approval, all necessary building permits will be obtained from the Humboldt County Building Department for all existing/proposed structures and supporting infrastructure.

1.4.5. CAL FIRE

The subject property is located within a State Responsibility Area (SRA) for fire protection. Proposed improvements include management of trees and vegetation around existing structures to maintain the required 100-foot defensible space. All structures on the property meet the 30-foot SRA setback requirement from property lines. The project proposes a designated fire turn-around and pull-out area for emergency vehicles and one (1) 2,500-gallon water tank dedicated to SRA emergency response. If needed, risers set to SRA specifications will be installed for firefighting purposes.

1.4.6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

A Lake and Streambed Alteration Agreement has been executed (Notification # 1600-2016-0442-R1) for one point of diversion from an unnamed tributary to Duke Creek. Water is only diverted as part of the SIUR for the approved and existing 10,000 sq. ft. of cultivation. No water diversion is proposed for the expansion of this application.

1.4.7. CULTURAL RESOURCES

If buried archaeological or historical resources are encountered during construction or cultivation activities, the applicant or contractor shall call all work in the immediate area to a halt temporarily, and a qualified archaeologist is to be contacted to evaluate the materials. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, ground stone artifacts, dietary bone, and human burials. If a human burial is found during construction, state law requires that the County Coroner be contacted immediately. If the remains are found to be those of a Native American, the California Native American Heritage Commission will then be contacted by the coroner to

determine appropriate treatment of the remains. The applicant is ultimately responsible for ensuring compliance with this condition.

2. CULTIVATION AND PROCESSING

2.1. PROPAGATION AND INITIAL TRANSPLANT

The applicants propose to propagate juvenile plants on-site from seeds and mother plants within the proposed nursery. The 43.5'x100' (4,350 sq. ft.) nursery will only be used for on-site function that allows ECD to develop the strongest genetics and a variety of strains to account for changes in market demand and streamline clone transfer through the track and trace program. The existing commercial facility may incorporate some aspects of the nursery process during peak seasons to allow for cleaner and climate-controlled areas for the mother plants and cuttings. Mother plants will remain in the vegetative stage solely for propagation. Cuttings will be sampled from the mother plants and rooted into a growing medium (e.g., oasis cubes) to produce clones. The clones will then be transferred to the vegetative nursery area, and after 2-3 weeks will be transplanted into one-gallon pots, or similar. The juvenile plants will be irrigated using hand watering methods, and after three weeks they will be transferred and transplanted into their final location where they will continue their vegetative cycle and eventually flower.

2.2. MIXED LIGHT CULTIVATION PLAN

The project proposes 33,560 sq. ft. of new mixed light cultivation canopy. Mixed light cultivation is proposed to reorganize the existing 10,000 sq. ft. of mixed light with the proposed 33,560 sq. ft. of mixed light to occur in one (1) 155.5'x280' gutter-connected greenhouse that is an ideal structure for year-round cultivation. The existing cultivation and operations on-site will remain to be operated until the proposed gutter-connected greenhouse has been issued a final permit from the Humboldt County Building Department. Areas that are proposed to be constructed in the locations of the existing cultivation will be built after the consolidation of canopy area has occurred. Greenhouses are proposed to be ventilated by intake and exhaust fans and will use temperature-controlled sensors and de-humidification systems to optimize the climate for cannabis cultivation. Cultivation will occur in hydroponic tables that allow for an irrigation plan that is designed to conserve and reuse as much water as possible. Juvenile plants will be transplanted from the nursery and planted in a reusable medium. The hydroponic tables allow a specific amount of water used for the needs and stages of the life of the plant. All unused water will be recaptured and reused minimizing the risk for overwatering that can cause run-off. The proposed growing style is beneficial not only for reducing water use but will help reduce the risk of pests or disease by allowing more control of the dry down of the growing medium. Greenhouses with the use of artificial lighting will include a combination of high-pressure sodium metal halide, LED, and Incandescent lights. Mixed light greenhouses will be equipped with blackout systems. Blackout systems shield greenhouses to prevent the escape of light and are designed to prevent visibility from neighboring properties between sunset and sunrise. Artificial light(s) used to enhance plant growth will be set on timers that activate ½-hour before sunset, daily. Prior to sunset each day, black out tarps will be automatedly or manually pulled over the mixed light greenhouses and nursery to prevent all light from escaping. The blackout tarps are constructed out of 2-ply 10-millimeter plastic with internal threading for shear strength.

Exterior lighting will be compatible with the existing setting. All exterior lighting to illuminate the entrances to existing structures will incorporate low intensity lighting with a small number of motion activated security lights. Lighting will be designed and located to direct downwards and within the property boundaries. Mixed light cultivation will utilize PG&E and have a generator for back-up purposes only during on-grid outages.

2.3. IRRIGATION PLAN AND SCHEDULE

Irrigation and fertigation of plants will occur using drip irrigation. New technology systems similar to Aroya will be implemented. These systems monitor volumetric water content to optimize the best greenhouse water management practices. Daily inspection of each plant allows the cultivator to tailor irrigation and nutrient application based on the needs of each individual plant. The monthly Cultivation Schedule in Appendix B details the irrigation activities associated with all cultivation.

2.4. PROCESSING (HARVESTING, DRYING AND TRIMMING)

Plants that are ready for harvest will have their flowering branches removed and placed in the proposed 60'x80' drying structure (Appendix A), where they will be suspended and left to dry for approximately one to three weeks. The dried flowers will be bucked into manageable buds and transported to an off-site processing facility until the proposed processing facility is constructed.

Cannabis processing currently occurs off-site at a licensed facility in the City of Arcata. The existing facility has an ADA restroom for employees. The restroom includes a working flush toilet as well as a sink with cold and hot running water.

2.5. EMPLOYEE PLAN

The applicant is an "agricultural employer" as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 of Division 2 of the Labor Code), and complies with all applicable federal, state and local laws and regulations governing California Agricultural Employers.

2.5.1. JOB DESCRIPTIONS AND EMPLOYEE SUMMARY

- *Agent in Charge*: Responsible for business oversight and management. Responsibilities include, but are not limited to: inventory and tracking, personnel management, record keeping, budget, and liaison with State and County inspectors as needed. This is a part-time to full-time, seasonal position.
- *Lead Cultivator*: Oversight and management of the day-to-day cultivation of commercial cannabis. Responsibilities include but are not limited to: plant propagation and transplant, soil management, irrigation, fertilization, pesticide management, and harvest activities. This is a full-time, year-round position.
- *Assistant Cultivator / Processing Manager*: Provides support to the *Lead Cultivator* in their day-to-day duties and takes the lead role during times when the *Lead Cultivator* may be off site. Once processing activities commence, the *Assistant Cultivator* duties switch to oversight and management of processing the dried commercial cannabis. This is a full-time, seasonal position.
- *Seasonal Laborer*: Provides cultivation, harvesting, and drying support and processing of cannabis. This is a part-time to full-time, seasonal position.

2.5.2. STAFFING REQUIREMENTS

In addition to the *Agent in Charge*, *Lead Cultivator*, and four (4) *Cultivation Technicians*, up to eight (8) part-time seasonal labor position may be employed for the cultivation activities that include planting and harvesting. The number of seasonal laborers varies based on the needs of the farm during the cultivation and harvest. During peak operational periods, the operation may require up to fourteen (14) employees.

2.5.3. EMPLOYEE TRAINING AND SAFETY

On-site cultivation, harvesting and drying will be performed by employees trained on each aspect of the procedure, including cultivation/harvesting techniques, use of pruning tools, and proper

application/storage of pesticides and fertilizers. As per Pesticide compliance, training must occur before a new employee begins to work in the field.. All cultivation staff will be provided with proper hand, eye, body and respiratory Personal Protective Equipment (PPE). Access to the on-site cultivation and drying facilities will be limited to authorized and trained staff. All employees will be trained on proper safety procedures including fire safety, use of PPE, proper hand washing guidelines, and emergency protocol. Contact information for the local fire department, Cal Fire, Humboldt County Sheriff and Poison Control as well as the Agent in Charge will be posted at the employee restroom. Each employee is provided with a written copy of emergency procedures and contact information. The material safety data sheets will be kept on site and accessible to employees.

2.5.4. TOILET AND HANDWASHING FACILITIES

The existing commercial facility has a restroom with ADA accommodations. A portable toilet will be brought on-site if needed during peak operation season to accommodate for the increased demand. Cultivation employees will have access to anti-bacterial liquid soap and paper hand towels. Work will occur at a distance no greater than 400 feet from the restroom facility.

2.5.5. ON SITE HOUSING

There is a residential structure on the project site. The owner of the parcel lives at the residence. The residence is not proposed as part of cultivation operations and will not be associated with the proposed project.

2.5.6. PARKING PLAN

Parking is proposed to be located near the cultivation area and the processing facility (Appendix A). An existing ADA parking space is located near the commercial facility.

2.6. SECURITY PLAN AND HOURS OF OPERATION

2.6.1. FACILITY SECURITY

The property is accessed through an entry gate that will remain locked at all times. Cultivation facilities (greenhouses, storage sheds, drying facility) will only be accessible through the locked gate. Access to the area is limited to employees and approved personnel including agency staff, consultants, and distributors.

2.6.2. HOURS OF OPERATION

Activities associated with cultivation in the greenhouses (watering, transplanting, and harvesting) generally occur during daylight hours. All other activities such as harvesting and drying typically occur no earlier than 8 AM and extend no later than 8 PM. Overnight or Off Shift work may be on a limited basis due to unknown variables that can occur during a cultivation cycle.

3. ENVIRONMENT

3.1. WATER DEMAND, STORAGE, AND SOURCE

The existing mixed light has an annual irrigation use of 120,000 gallons of water. The existing cultivation is authorized to use an existing, onsite surface water diversion. With the approval of the proposed expansion, the surface water diversion would cease for cannabis use.

3.1.1. WATER DEMAND

The proposed expansion would increase total cultivation water use to 610,000 gallons (*Table 1*), for an increase of 490,000 gallons of additional water use. The annual irrigation demand is approximately 610,000 gallons (14 gallons/sf). *Table 1* outlines the estimated irrigation water usage for cultivation

during a typical year. McKinleyville's cool and humid climate allows for less than average water uses compared to drier climates. Variables specific to cultivated cannabis strains may have a slight effect on water use.

Table 1: Estimated Monthly and Total Annual Irrigation Water Usage

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Irrigation Use (1,000 gallons)	35	35	40	40	60	60	75	75	60	60	35	35	610

3.1.2. WATER STORAGE

Existing onsite irrigation water storage infrastructure is comprised of a permitted 90,000-gallon metal tank and four (4) 5,000-gallon tanks, for a total storage capacity of 110,000 gallons.

3.1.3. WATER SOURCE

To establish a redundant and robust system, the proposed irrigation water source is a combination of reclaimed water from the dehumidification and air conditioning (A/C) units, rainwater collection, and an existing groundwater well¹.

3.1.3.1. Reclaimed Water

The dehumidifier units and A/C units will serve a dual purpose of climate control and capturing condensed water. Condensed water will be plumbed to the irrigation water storage tanks to be reclaimed and reused for irrigation.

The applicant proposes to use eight (8) 5000W Anden 710 high-efficiency dehumidifier units and four (4) A/C units for indoor cultivation and eight (8) 5000W Anden 710 high-efficiency dehumidifier units for mixed light cultivation. All dehumidifier and A/C units would be operated year-round.

Each dehumidifier has a maximum reported recapture rate of approximately 710 pints (88.75 gallons) per day². Each A/C unit has the potential to capture up to 12.5 gallons of water per day. For conservativeness, a capture efficiency of 60% is assumed. Thus, the dehumidifiers and A/C units have the potential to reclaim approximately 321,930 gallons of water annually to reuse for irrigation.

3.1.3.2. Rainwater Collection

The potential rainwater collection volume was estimated based on the rainwater catchment surface area (existing and proposed buildings) and historic rainfall data. Historic rainfall data was sourced from PRISM Climate Group (PRISM Climate Data, 2021)³, which provides site-specific average annual rainfall data based on topography and historic precipitation values from 1985 through 2021. Using annual rainfall from 2000-2021, the average rainfall for the project area is 49.5 inches. The lowest rainfall year was 2013 and totaled 24.2 inches.

Roof areas on which rainwater catchment is proposed to be implemented are summarized in *Table 2*. It is assumed that 50% of the proposed greenhouse surface area would be effective catchment area and the existing buildings would provide the remaining catchment area. The low annual rainfall

¹ Hydrogeology Evaluation – ECD Holdings, Inc. February 2023

² [anden-a710v1-dehumidifier-specification-sheet-6563.pdf \(widen.net\)](#) (Appendix E)

³ http://www.prism.oregonstate.edu/documents/PRISM_datasets.pdf (Appendix D)

represents the lowest rainfall year in the PRISM record in the vicinity of the site, representing the driest year.

The average monthly rainfall distribution was obtained from PRISM and used to distribute the annual rainfall for an average year and a dry year. The rainfall distribution along with the potential rainwater catchment and estimated actual rainwater catchment are illustrated in Figure 1 and Figure 2. It is assumed that the actual rainwater catchment efficiency is 85% of the potential rainwater harvest volume. Using an efficiency of 85%, the total annual rainwater catchment during an average year and a dry year are 720,503 gallons and 352,249 gallons, respectively.

Table 2: Estimated Rainwater Catchment Area and Volumes during Average and Low Rainfall Years.

Catchment Surface	Roof Area (sf)	Catchment Area (sf)	Average Annual Rainfall (in)	Low Rainfall Year (in)	Potential Rainwater Harvest Volume Average Year (gallons)	Potential Rainwater Harvest Volume Low Year (gallons)
<P>155.5'x280' Greenhouse	43,560	21,770	49.5	24.2	671,760	328,420
<E> 2,400 sf Building	2,400	2,400	49.5	24.2	74,060	36,210
<E> 50'x66' Building	3,300	3,300	49.5	24.2	101,830	49,780
Total		27,470			847,650	414,410

Note: 1-inch of rainfall over 27,470 sf produces 17,124 gallons. 85% of this is 14,555 gallons.

3.1.3.3. Well Water

Well water would be used to offset reclaimed water and rainwater collection during the summer months when rainfall is low. The monthly water balance, using actual rainfall collection (Figure 1 and Figure 2), is summarized in Table 4 and Table 5, for an average and dry year, respectively. Approximately 127,300 gallons and 171,800 gallons of well water would be needed to offset rainwater during an average and dry year, respectively, representing less than 30% of the overall irrigation demand annually (Table 3). The maximum daily pumping rate, to keep the tank storage full, is less than 3.1 gallons per minute (gpm) over an 8-hour pumping period, during daylight hours, as the pump is powered by solar.

Table 3: Irrigation demand (in percent) by water source.

Source	Average Year	Dry Year
Recapture	53%	53%
Rainwater	26%	19%
Well Water	21%	28%

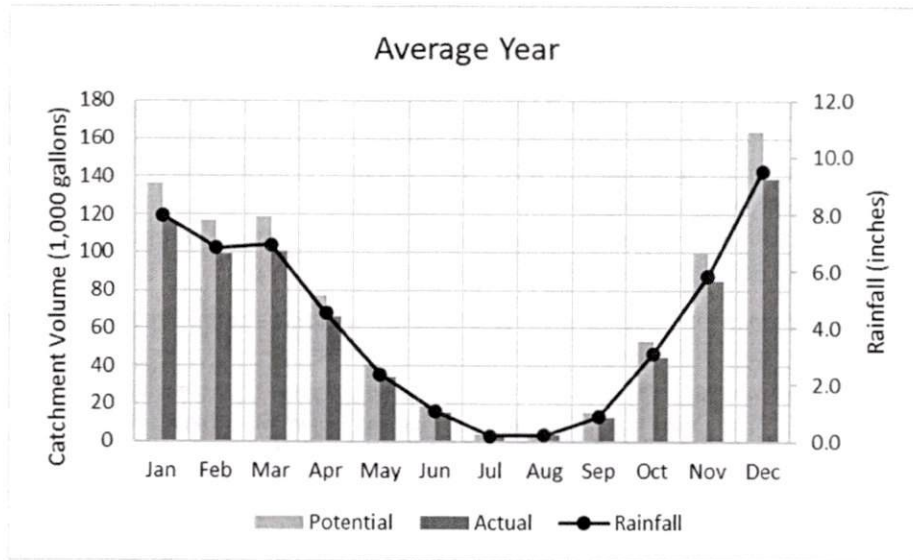


Figure 1. Rainfall distribution and rainwater catchment volume for an average year.

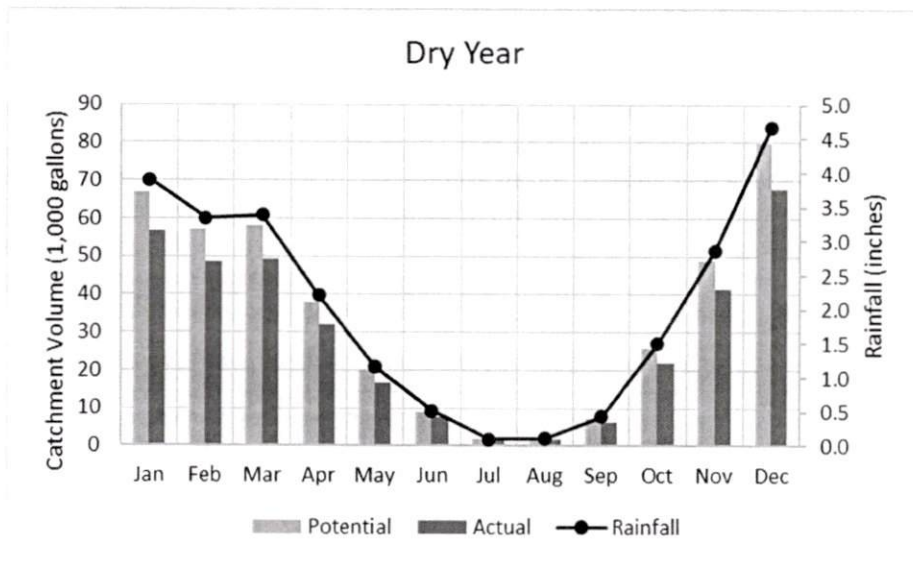


Figure 2. Rainfall distribution and rainwater catchment volume for a dry year.

OPERATIONS MANUAL
ECD HOLDINGS, INC

Table 4: Monthly water use and storage during an average year (1,000 gallons).

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Total
Water in storage at beginning of month	110	110	110	110	110	110	110	110	110	110	110	110	110	N/A
Water demand for irrigation	-35	-35	-40	-40	-60	-60	-75	-75	-60	-60	-35	-35	-35	-610
Reclaimed water	27.3	24.7	27.3	26.5	27.3	26.5	27.3	27.3	26.5	27.3	26.5	27.3	27.3	321.9
Water needed to fill tank by end of month	7.7	10.3	12.7	13.5	32.7	33.5	47.7	47.7	33.5	32.7	8.5	7.7	7.7	N/A
Rainfall to storage	7.7	10.3	12.7	13.5	32.7	15.6	3.1	3.4	13.0	32.7	8.5	7.7	7.7	160.7
Storage at end of month (reclaimed water plus rainwater collection)	110	110	110	110	110	92	65	66	89	110	110	110	110	N/A
Well water to fill tank	0	0	0	0	0	18	45	44	21	0	0	0	0	127.3
Daily well pumping rate (gpm) – 8-hr daylight period	0	0	0	0	0	1.2	3.0	3.0	1.4	0	0	0	0	N/A

Table 5: Monthly water use and storage during an dry year (1,000 gallons).

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Total
Water in storage at beginning of month	110	110	110	110	110	110	110	110	110	110	110	110	110	N/A
Water demand for irrigation	-35	-35	-40	-40	-60	-60	-75	-75	-60	-60	-35	-35	-35	-610
Reclaimed water	27.3	24.7	27.3	26.5	27.3	26.5	27.3	27.3	26.5	27.3	26.5	27.3	27.3	321.9
Water needed to fill tank by end of month	7.7	10.3	12.7	13.5	32.7	33.5	47.7	47.7	33.5	32.7	8.5	7.7	7.7	N/A
Rainfall to storage	7.7	10.3	12.7	13.5	16.9	7.6	1.5	1.7	6.3	21.9	8.5	7.7	7.7	116.3
Storage at end of month (reclaimed water plus rainwater collection)	110	110	110	110	94	84	64	64	83	99	110	110	110	N/A
Well water to fill tank	0	0	0	0	16	26	46	46	27	11	0	0	0	171.8
Daily well pumping rate (gpm) – 8-hr daylight period					1.1	1.8	3.1	3.1	1.9	0.7				N/A

3.1.4. SITE DRAINAGE, RUNOFF, AND EROSION CONTROL

The applicant has enrolled with the State Water Resources Control Board (SWRCB) for coverage under the General Order. Upon approval, a Site Management Plan (SMP) for the proposed expansion will be developed; the SMP will detail erosion control and sediment capture measures, as well as road maintenance and runoff activities.

3.1.5. STORMWATER MANAGEMENT PLAN

The proposed 155.5'x280' mixed-light greenhouse, the proposed 4,800-sq. ft. drying building, and the 43.5'x100' nursery will increase onsite impermeable surfaces. This 57,000 sq. ft. of impermeable surface comprises approximately 9% percent of the 627,264-sq. ft. (14.4-acre) parcel. Drainage and stormwater runoff will be addressed in the Erosion and Sediment Control Plan, which will be submitted to the Humboldt County Planning and Building Department with the Grading Permit application. Stormwater management for the remainder of the property will follow the Humboldt County Low Impact Development Stormwater Manual and will also be addressed in the Site Management Plan (SMP), which will also include recommendations for road network maintenance. In addition, proposed development is located greater than 100-feet from any watercourses, providing a sufficient buffer to prevent potential sediment or nutrient delivery.

3.1.6. EROSION CONTROL

The SMP and the Grading Permit will include erosion and sediment control best practicable treatment controls (BPTCs) designed to prevent, contain, and reduce sources of sediment. Additionally, the SMP will include site-specific corrective actions to ensure property maintenance and erosion control.

3.2. WATERSHED AND HABITAT PROTECTION

All proposed cultivation activities will be set back at least 100-ft from any wetlands, drainages and watercourses on site, greater than the 50-ft setback required by the County's Streamside Management Ordinance. These setbacks should provide a suitable buffer between the cultivation operation and habitat. Adherence to the Site Management Plan will ensure that erosion control and sediment capture BPTC measures are in place to prohibit water quality degradation of the nearby river. Any grading and earthwork activities will be conducted by a licensed contractor in accordance with approved grading permits.

Additionally, the applicant will follow all recommendations in the Biological Resources Assessment, which has been prepared for the property by Naiad Biological Consulting (2021).

3.3. INVASIVE VEGETATIVE SPECIES CONTROL PLAN

Once proposed cultivation activities commence, the cultivation area will be monitored for invasive species. If invasive species are located, hand tools (shovels, weed wrenches, trowels, or hand saws) may be used to remove them. The exact rate and method of invasive species removal will be determined based on the species identified. The areas of disturbance shall be surveyed and maintained twice each year, at a minimum, as part of the invasive species control plan.

The following is a partial list of websites to be used for proper identification and treatment:

1. <https://calflora.org//>
2. <https://plants.usda.gov/java/>
3. <https://www.cal-ipc.org/>
4. <https://www.cal-ipc.org/solutions/>
5. <http://www.rareplants.cnps.org/>
6. <https://www.wildlife.ca.gov/Conservation/Plants#22064102-california-native-plant-information>
7. <http://ucjeps.berkeley.edu/>
8. http://wetland-plants.usace.army.mil/nwpl_static/v33/home/home.html
9. <https://www.fws.gov/invasives/partnerships.html>

3.4. MATERIALS MANAGEMENT PLAN

Cultivation, harvesting, and drying shall be performed by employees trained on each aspect of the procedure, including cultivation and harvesting techniques, the use of pruning tools, and proper application/storage of pesticides/ and fertilizers. All cultivation and processing staff will be provided with proper hand, eye, body, and respiratory Personal Protective Equipment (PPE). Access to the onsite cultivation, drying and processing facilities will be limited to authorized and trained staff. Mixing of fertilizers in small storage tanks is solely conducted in a designated area (to be determined) where the mix will not enter surface waters. For young plants, the mix is applied via watering wand and mature plants are fertigated at agronomic rates by drip emitters or hand watering methods. Spent soil is amended and reused as needed. The application of any agricultural chemical products will be conducted according to the manufacturer's recommendation.

Employees will be trained on usage and handling procedures of associated equipment and cleaning procedures. Chemicals and hazardous materials will be only used with equipment as recommended by manufacturers. Cleaning will occur regularly with instructions based on the manufacturer's recommendations. All cleaning materials will be put away and stored properly within secondary containment when not in use and hazardous containers will be properly disposed of. Additionally, if there are any spills on site, a spill kit with sorbent pads will be accessible.

On-site inventory is kept for all chemicals. Chemicals will be used and stored based on manufacturer's recommendations and requirements. Any materials required for use of chemicals will be provided to employees. The material safety data sheets (MSDS) will be kept on site and accessible to employees.

All hazardous waste will be stored within secondary containment. Additionally, a log will be kept in order to account for the volume of hazardous waste. Fertilizers and pesticides will be stored in a separate location from petroleum products. The aforementioned products will be located within secondary containment in a storage shed. No rodenticides will be used on site. At the end of the season, any unused liquid products will be stored in secondary containment and will be applied the following year. Before unused products are stored at the end of the season, an employee will take inventory of the volumes and products. Additionally, all waste will be properly disposed of off-site and at the correct facility. All trash, empty product containers, and recycling will be hauled off-site bi-weekly to the nearest licensed waste management facility.

Appropriate BPTC measures will be utilized when storing, handling, mixing, applying, and disposing of all fertilizers, pesticides, herbicides, rodenticides, or any other hazardous materials. Each year an inventory will be conducted prior to the beginning of the grow season and necessary products will be delivered to the site as needed.

3.5. SOILS MANAGEMENT PLAN

The applicant is proposing to plant all cultivation on tables and use a soilless growing medium within the greenhouse structures. The growing medium will be removed from the site and sent to the correct disposal station. If stored on site during the wet season, any growing medium spoils piles will be located in a flat area outside of riparian setbacks and winterized, likely with a tarp underneath the pile and straw wattles located around the pile to prevent leachate from entering surface waters. Potential spent soils will be properly disposed of off-site at an appropriate facility.

3.6. HAZARDOUS WASTE STATEMENT

There are no hazardous materials mapped onsite. The site has been historically utilized for a residential property and agriculture. A search of the EnviroSTOR database shows no GeoTracker Cleanup Programs on-site. The greenhouse may potentially use liquid CO₂ to increase plant growth. Liquid CO₂ is non-flammable. All health and safety regulations will be followed.

3.7. ENERGY PLAN

Power will be sourced from the existing PG&E drop. A generator will remain onsite for backup and emergency use.

3.8. WASTE MANAGEMENT

3.8.1. CULTIVATION

Organic cultivation-related waste, including root balls, branches, and leaves will be hauled off site to a green waste management facility as needed. All cultivation waste weight will be recorded and logged for compliance purposes. Trash and recycling from cannabis operations, including empty soil or fertilizer bags, liquid fertilizer bottles, cultivation supplies, etc., will be taken to the nearest waste management facility as needed.

3.8.2. SEWAGE DISPOSAL PLAN

The applicant has an existing ADA bathroom in the commercial building. A portable toilet will be brought on-site during peak operation season to accommodate for the increased demand.

4. PRODUCT MANAGEMENT

4.1. PRODUCT TESTING AND LABELING

Samples will be selected from individual harvested cannabis strains and tested by a licensed third-party lab in accordance with State and local standards. The finished product is labeled and will include tracking ID's provided by the California Cannabis Track-and-Trace (CCTT) METRC system.

4.2. PRODUCT INVENTORY AND TRACKING

The applicants will follow all regulations and requirements set by the CCTT-METRC system. After approval of state licenses related to the proposed cultivation, the applicants will request credentials and order unique identifiers (UIDs) which will be assigned to each immature lot, flowering plant, and distinct cannabis product.

4.3. TRANSPORTATION AND DISTRIBUTION

Transportation will be handled by a licensed transporter/distributor in accordance with State and Local regulations. All merchantable products will be distributed through licensed commercial cannabis dispensaries. The CCTT-METRC system will be used for all transactions with distributors or transporters.

OPERATIONS MANUAL
ECD HOLDINGS, INC

APPENDIX B: CULTIVATION ACTIVITIES SCHEDULE

Item	Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Drainage, Runoff, and Erosion Control	Winterization (storage of pots/greenhouse covers)												
	Temporary Erosion Control BMP's (straw, seeding, fiber rolls, etc.)												
	Road maintenance												
	Cover soil beds												
Irrigation Activities	Irrigation of juvenile plants/clones												
	Irrigation of flowering plants												
Mixed Light Cultivation and Harvest Schedule	Mixed Light / Light Dep Cycle 1												
	Mixed Light / Light Dep Cycle 2												
	Mixed Light / Light Dep Cycle 3												
	Mixed Light / Light Dep Cycle 4												
	Mixed Light / Light Dep Cycle 5												
	Harvest activities												
	Light deprivation: Greenhouses are covered with blackout covers												
Drying and Processing	Drying Activities												
	Trimming Activities												

APPENDIX C: REFERENCES

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<<http://www.boe.ca.gov/news/pdf/173.pdf>>

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APPENDIX D: PRISM DATA

PRISM Time Series Data

Location: Lat: 40.9687 Lon: -124.0853 Elev: 266ft

Climate variable: ppt

Spatial resolution: 4km

Period: 2000 - 2020

Dataset: AN81m

PRISM day definition: 24 hours ending at 1200 UTC on the day shown

Grid Cell Interpolation: On

Time series generated: 2022-Feb-10

Details: http://www.prism.oregonstate.edu/documents/PRISM_datasets.pdf

Annual Rainfall since 2000

Date	ppt (inches)
2000	44.93
2001	42.57
2002	49.17
2003	56.99
2004	45.46
2005	57.01
2006	59.93
2007	46.51
2008	42.53
2009	35.78
2010	67.65
2011	46.03
2012	64.64
2013	24.16
2014	53.63
2015	43.96
2016	62.78
2017	62.41
2018	44.05
2019	56.45
2020	36.54

Average	49.7
Minimum	24.2

Monthly Rainfall in 2013

Details:

http://www.prism.oregonstate.edu/documents/PRISM_datasets.pdf

Date	ppt (inches)
2013-01	3.46
2013-02	2.1
2013-03	3.67
2013-04	2.94
2013-05	2.41
2013-06	1.03
2013-07	0.01
2013-08	0.09
2013-09	5.55
2013-10	0
2013-11	1.99
2013-12	1.11

APPENDIX E: DEHUMIDIFIER SPECIFICATIONS



High-Capacity, Grow-Optimized Dehumidifier with VLGR Technology

Model A710V1 | Specification Sheet

SPECIFICATIONS

Capacity ¹ PPD AT 80°/60%RH	710
Energy factor ²	3.0 L/kWh 6.35 pints/kWh
Voltage, Phase, Frequency	208-240VAC, 1 Phase, 60 Hz
Current draw (amps) ³	19.6
Power (watts) ³	4,706
Btu/h ³	16,168
Power cord type and length	5JT, L6-30P, 10ft
Hardwire	Field-configurable
Breaker size	30 amp
Wire size	10 Gauge Copper
CFM	0.0" w.c 1760 0.2" w.c 1677 0.4" w.c 1593 0.6" w.c 1510
Dimensions:	W: 44 1/8" H: 34 3/8" L: 31 7/8"
Weight	360 lbs.
Operating range Temp/RH	60/40 to 95/80

¹Rated capacity and energy factor test done and current draw measured at 80°F/60% RH, 110V AC at 0.0 ESP, 240 VAC.

²Total cooling load @ 80°F/60% RH and 240 VAC.

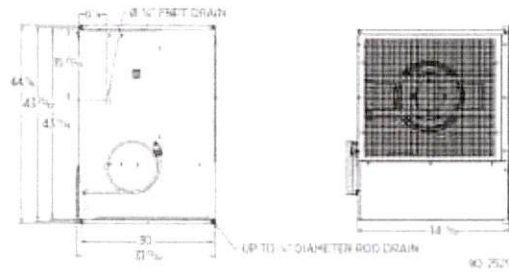
FEATURES

Control	Onboard digital with diagnostics
Air supply orientation	Horizontal
Filter	29.5"x31.5"x1.75" MERV 11 (Part #5852)
Refrigerant	R410A
Coil type	Copper tube, Aluminum fin with i-coat
Drain connection ¹	1/4" FNPT
P-Trap required	Yes (Included)
Leveling feet	Sold separately (Model #5789)
Hanging brackets	Built-in
Duct Kit	Sold separately (Part # 5859)
Warranty	5 Years on all parts including refrigeration system

¹Requires drain trap

INCLUDED ITEMS

Control	Model A77
Drain fittings	1/4" MNPT x 1/2" BARB, 1/4" MNPT x 1/4" Female pipe, 1/4" x 1/4" x 1/4" T-Fitting, 1/4" P-Trap
Thermostat wire	30 20 gauge 4-wire



APPLICATION

The Anden Model A710V1 Dehumidifier is the perfect solution for the precise management of humidity required in an indoor growing environment. It features VLGR Technology, which modulates the refrigeration system based on the load, allowing you to maximize VPD and provide greater control during late flower conditions.

INCLUDED CONTROL



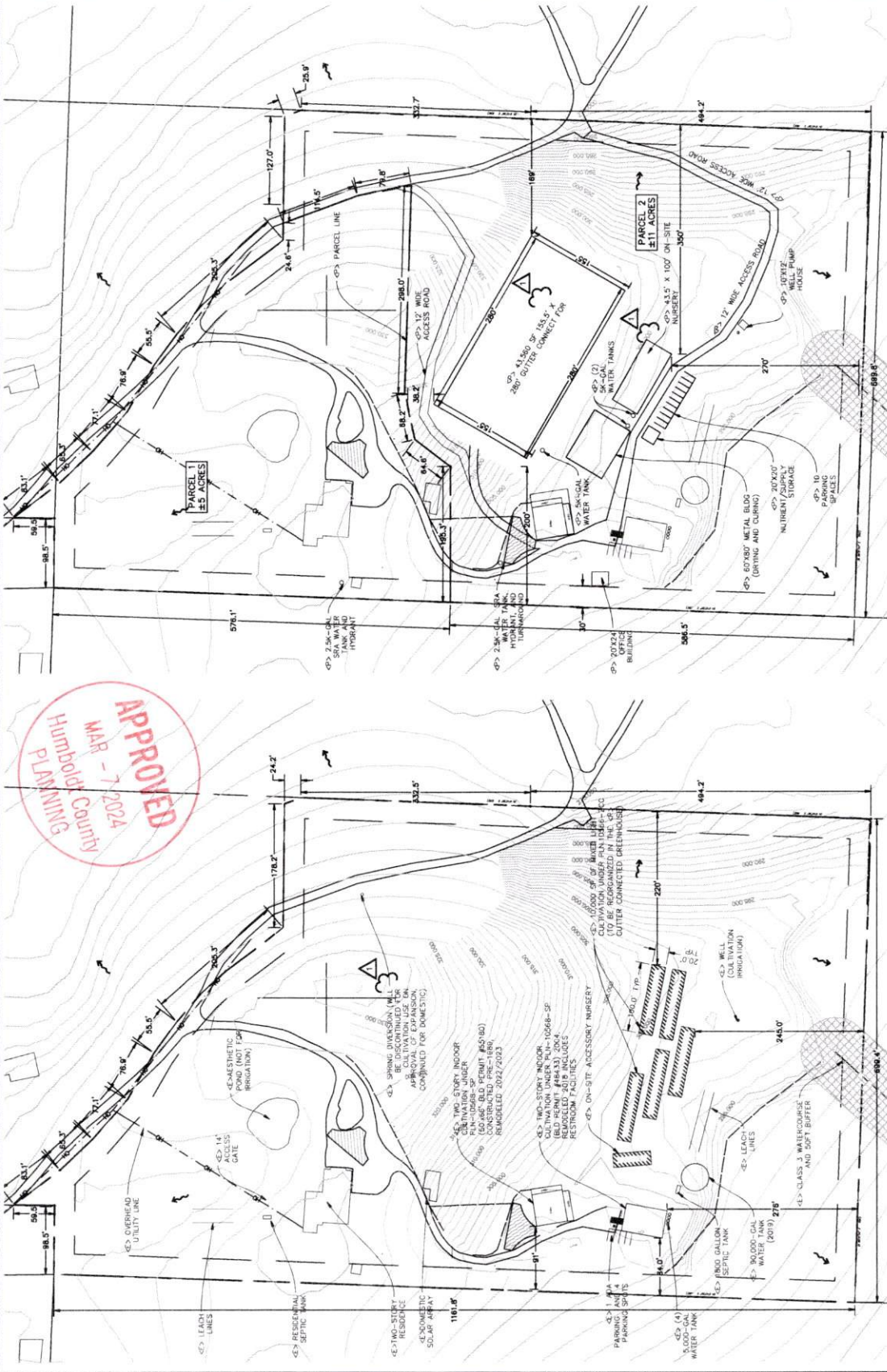
MODEL A77

Dedicated monitoring and control of each dehumidifier at canopy height

MODEL A77 SPECIFICATIONS

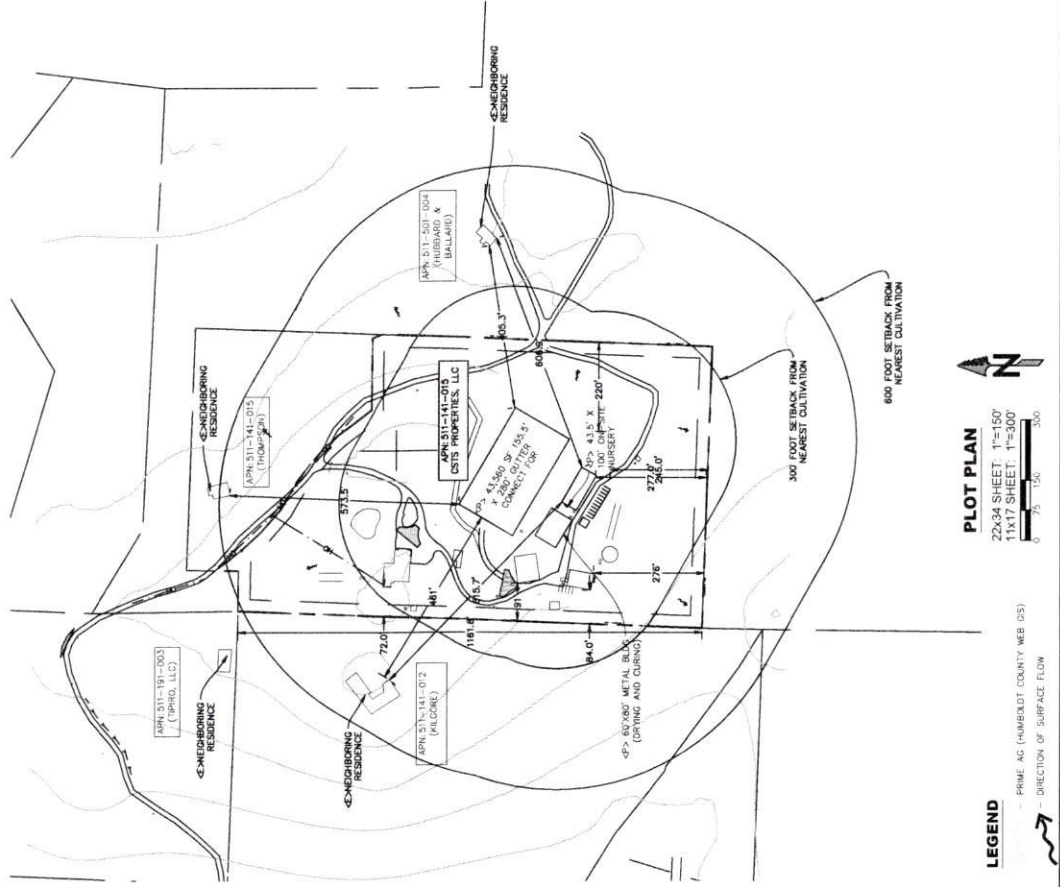
Electrical	
Input voltage and current	Voltage: 35VDC (supplied by dehumidifier control board)
Output	Communication (RS485)
Control	
Control range	35%-80% RH
Accuracy	±1.5% RH
Differential	3% RH
Low limit	40°F dew point
High limit	99°F dry bulb





ECD HOLDINGS, INC SETBACK AND BUFFERS

APN: 511-141-015



PLOT PLAN
22x34 SHEET: 1"=150'
11x17 SHEET: 1"=300'



LEGEND

- PRIME AC (HUMBOLDT COUNTY WEB 05)
- DIRECTION OF SURFACE FLOW