PROPERTY MANAGEMENT PLAN
AKWAABA FARMS

APPLICANT
Akwaaba, LLC

PROJECT LOCATION
11795 North Drive
Clearlake Park, CA 95424

PROJECT PARCEL/PROPERTY
Lake County APN 010-019-15

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PROJECT DESCRIPTION

Akwaaba, LLC ("Akwaaba") is seeking a Major Use Permit from the County of Lake for a proposed Outdoor Commercial Cannabis Cultivation Operation at 11795 North Drive near Clearlake Park, CA on Lake County APN 010-019-15 (Project Parcel). Akwaaba's proposed cultivation operation will be composed of two A-Type 3 "Medium Outdoor" cultivation areas, with a combined total canopy area of 73,560 ft^2, and an A-Type 2B "Small Mixed-Light" cultivation area, with a total canopy area of 9,720 ft^2. The total cultivation area of the proposed cannabis cultivation operation (as defined in Chapter 21, Article 27 of the Lake County Code), including the combined cultivation/canopy areas, an existing 1,800 ft^2 Metal Barn (proposed Drying & Harvest Storage Facility), and a 160 ft^2 Metal Shipping/Storage Container (proposed Pesticide & Agricultural Chemicals Storage Area) is 85,240 ft^2.

The Project Property is composed of two parcels totaling approximately 97 acres (Lake County APNs 010-019-10 and 15), both of which are owned by Akwaaba, LLC. The Project Parcel is located just west of the City of Clearlake, along the spine of Sulphur Bank Ridge, and is accessed via North Drive and Crestview Drive. The Project Property has been improved with a metal barn and a groundwater well. A private gravel and native soil surfaced access road winds through the Project Parcel, connecting North Drive to Crestview Drive through the Project Parcel. Metal gates control access to the private gravel and native soil surfaced access road from North Drive and Crestview Drive. There are no watercourses, wetlands, or watercourse crossings on the Project Parcel. All water for the proposed cultivation operation will come from the existing onsite groundwater well located at Latitude: 38.99555° and Longitude: -122.68973°. The Project Parcel has been enrolled for coverage under the State Water Resources Control Board's Cannabis General Order (WQ-2019-0001-DWQ) since October 30th, 2020.

Development of the proposed cultivation operation would occur in two phases. The first phase of project/site development would occur immediately after issuance of a Major Use Permit for the proposed cultivation operation. The second phase of project/site development would occur approximately one year after the issuance of the Major Use Permit. No trees will be removed from the Project Parcel as a result of site/project development, and no grading would be necessary to establish the proposed cultivation operation. Additionally, four Konocti manzanita have been identified on the Project Parcel. No disturbance/development is proposed within 100 feet of the Konocti Manzanita, and a 50-foot buffer will be marked and maintained around the Konocti Manzanita.

The cultivation season for Akwaaba's proposed outdoor cultivation operation will begin on April 15th and end on November 15th of each year. All cannabis waste generated from the proposed cultivation operation will be chipped and composted onsite. Composted cannabis waste will be stored in a designated composting area, until it is incorporated into the growing medium of the

cultivation areas, as an organic soil amendment. All agricultural chemicals (fertilizers, amendments, pesticides, and petroleum products) will be stored within a proposed 20-foot metal shipping/storage container (Pesticide & Agricultural Chemicals Storage Area).

The proposed outdoor cultivation areas will be enclosed with 6-foot tall galvanized woven wire fences, covered with privacy screen/mesh where necessary to screen the cultivation/canopy areas from public view. Locking metal gates will control access to the proposed cultivation/canopy areas, and the metal gates will be locked whenever Akwaaba's cultivation personnel are not present. The growing medium of the proposed cultivation/canopy areas will be an imported organic soilless growing medium (composed mostly of composted forest material) in aboveground fabric and plastic nursery pots. Akwaaba will use drip and micro-spray irrigation systems to deliver irrigation water and to conserve water resources.

Akwaaba will adhere to the inventory tracking and recording requirements of the California Cannabis Track-and-Trace (CCTT) system. All staff will be trained in the requirements of the CCTT system, and a member of Akwaaba's managerial staff will be the designated track-and-trace system administrator. The designated track-and-trace system administrator will complete an initial training provided by the California Department of Food and Agriculture and will participate in ongoing training as required. All cannabis transfers/movement will be reported through the CCTT system, and a track-and-trace system administrator will supervise all tasks with high potential for diversion/theft.

Mixed-Light Cultivation/Canopy Areas ("Low Hoops")

The proposed mixed-light canopy areas will be located within 6-foot wide and 90-foot long rudimentary hoop house structures, that are less than 7 feet tall, and commonly referred to as "Low Hoops". The Low Hoops will be composed of 2" PVC pipes with 6-mil polyethylene glaze, supported by rebar (driven into the ground 18 inches deep), and wooden cross members. No mechanical, electrical, or plumbing will be installed within or around the Low Hoops. As described above, the Low Hoops do not fall under the jurisdiction of the State of California nor County of Lake Building Code, and therefore do not require a Building Permit.

SITE PLANS AND MAPS

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Sheet 2 – Surrounding Area Aerial

Sheet 3 – Existing Conditions Site Plan

Sheet 4 – Proposed Conditions Site Plan (Phase I)

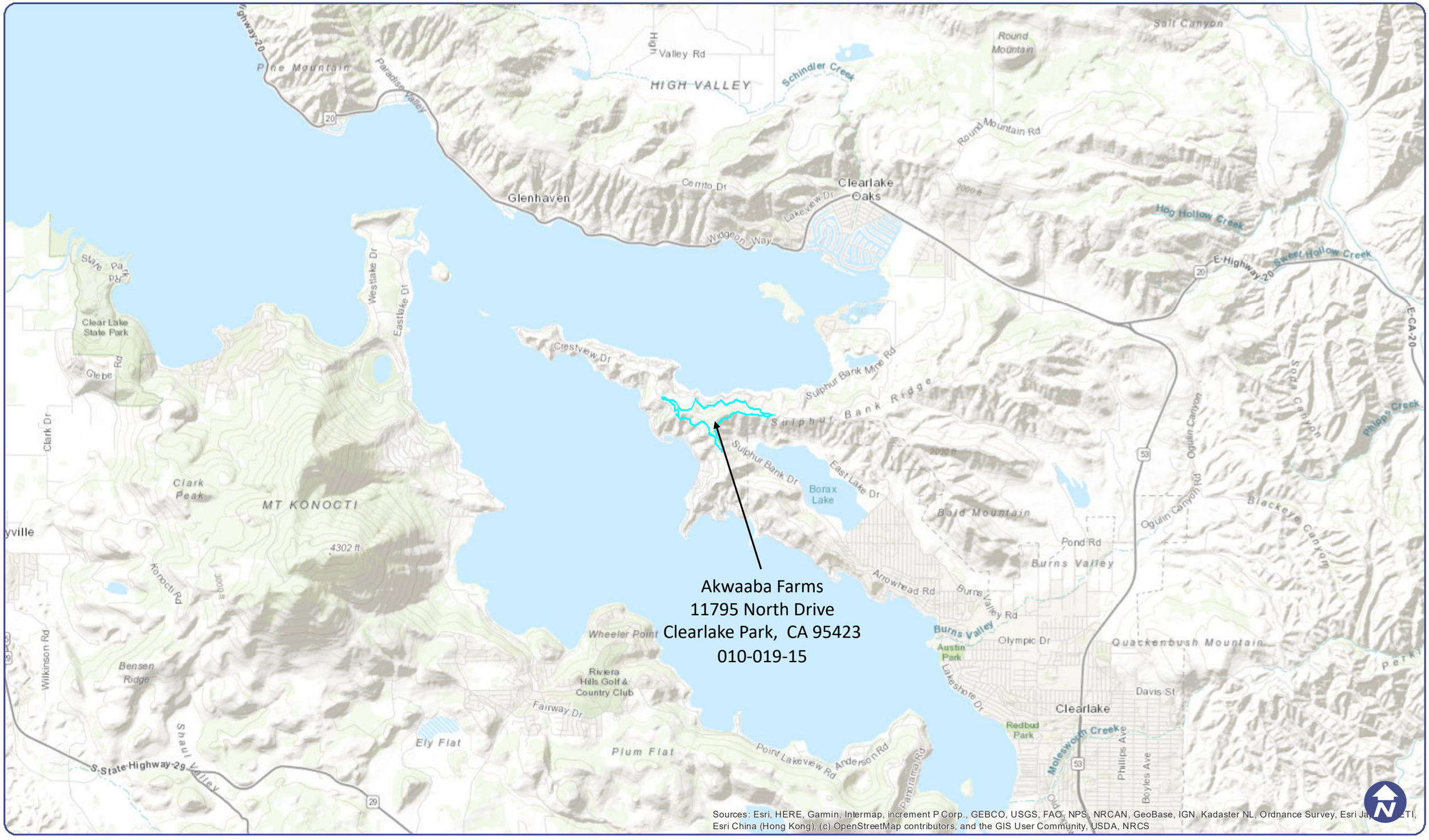
Sheet 5 – Proposed Conditions Site Plan (Phase II)

Sheet 6 – Cultivation Site Plan with Canopy

Sheet 7 – Security Site Plan

Sheet 8 – Proposed Processing Facility Layout

Sheet 9 – Erosion and Sediment Control Plan



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, USDA, NRCS

Lake County, CA

Akwaaba Farms

Web AppBuilder for ArcGIS

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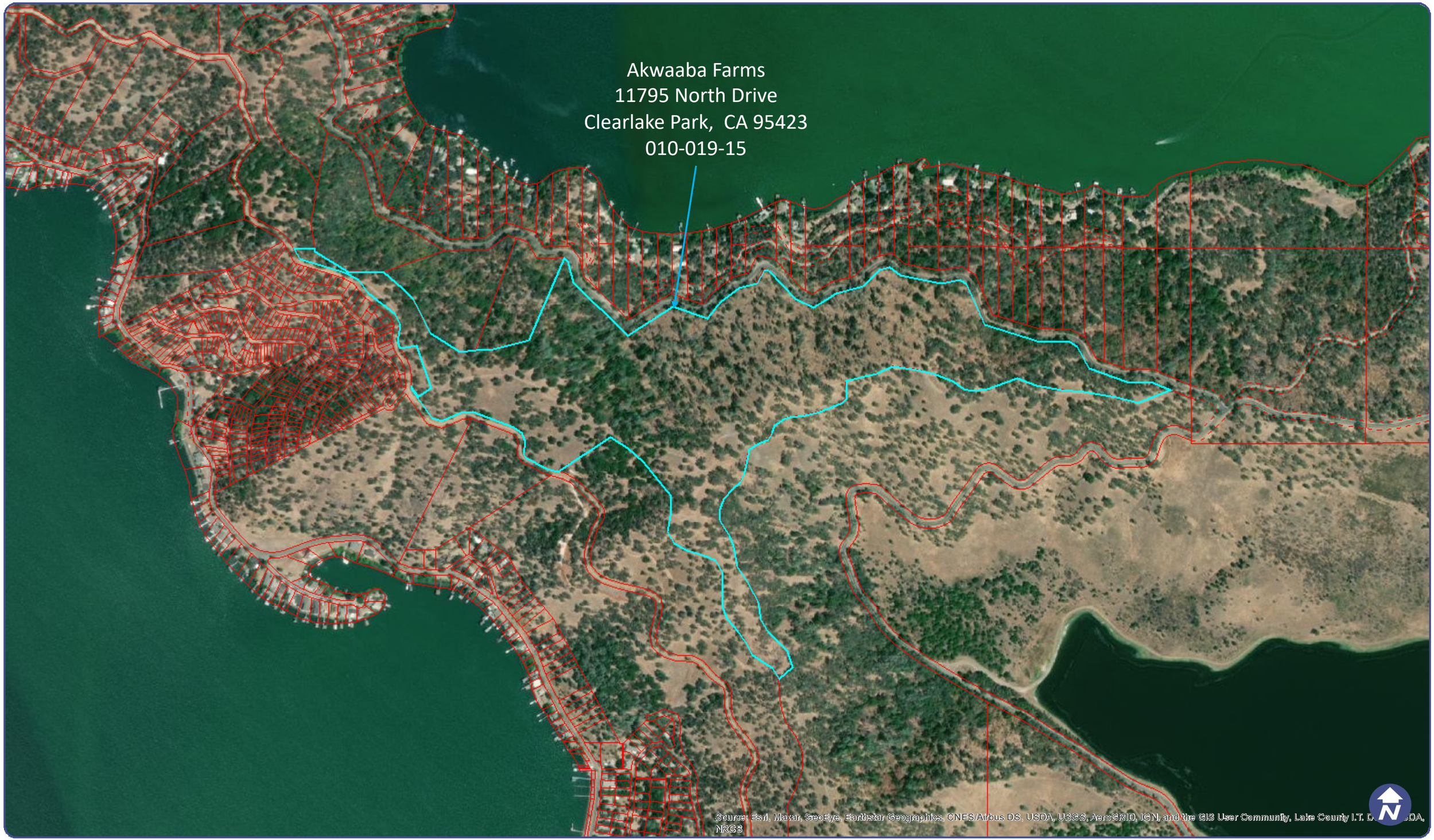
Print Date: 3/23/2021

All parcel boundaries are *approximate*. Discrepancies in acerage, shape and location are common. This map is not the legal survey document to be used in single site determinations. Consult your deed for a legal parcel description.



Lake County, CA

Akwaaba Farms

Web AppBuilder for ArcGIS

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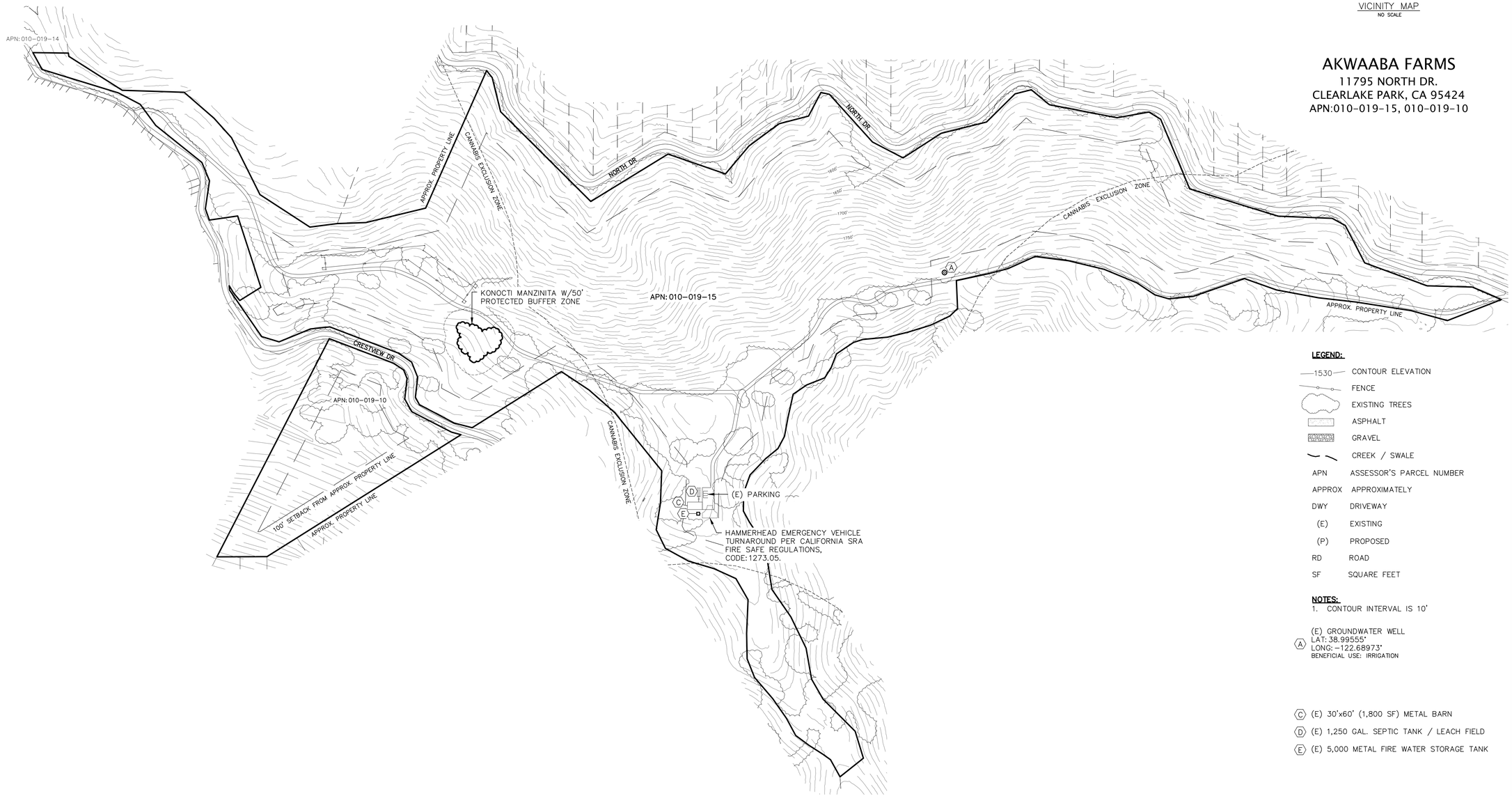

VICINITY MAP
NO SCALE

AKWAABA FARMS

11795 NORTH DR.
CLEARLAKE PARK, CA 95424
APN:010-019-15, 010-019-10

LEGEND:

1530	CONTOUR ELEVATION
	FENCE
	EXISTING TREES
	ASPHALT
	GRAVEL
	CREEK / SWALE
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
DWY	DRIVEWAY
(E)	EXISTING
(P)	PROPOSED
RD	ROAD
SF	SQUARE FEET

NOTES:
1. CONTOUR INTERVAL IS 10'

(A) (E) GROUNDWATER WELL
LAT: 38.99555°
LONG: -122.68973°
BENEFICIAL USE: IRRIGATION

(C) (E) 30'x60' (1,800 SF) METAL BARN

(D) (E) 1,250 GAL. SEPTIC TANK / LEACH FIELD

(E) (E) 5,000 METAL FIRE WATER STORAGE TANK

EXISTING CONDITIONS SITE PLAN

GRAPHIC SCALE
200 0 100 200
(IN FEET)
1 inch = 200 ft.

Revisions:

REALM ENGINEERING
CIVIL ENGINEERING, SURVEYING & PLANNING
1767 MARKET STREET SUITE c
REDDING, CA. 96001
530-526-7493

PLANS PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER
JASON B. VINE
No. 67800
EXP. 06/30/21
CIVIL
STATE OF CALIFORNIA

EXISTING CONDITIONS SITE PLAN

APNs:010-019-15, 010-019-10 & 010-019-14
11795 NORTH DRIVE
CLEARLAKE, CA 95422
LAKE COUNTY

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DATE PLOTTED:	6/01/21
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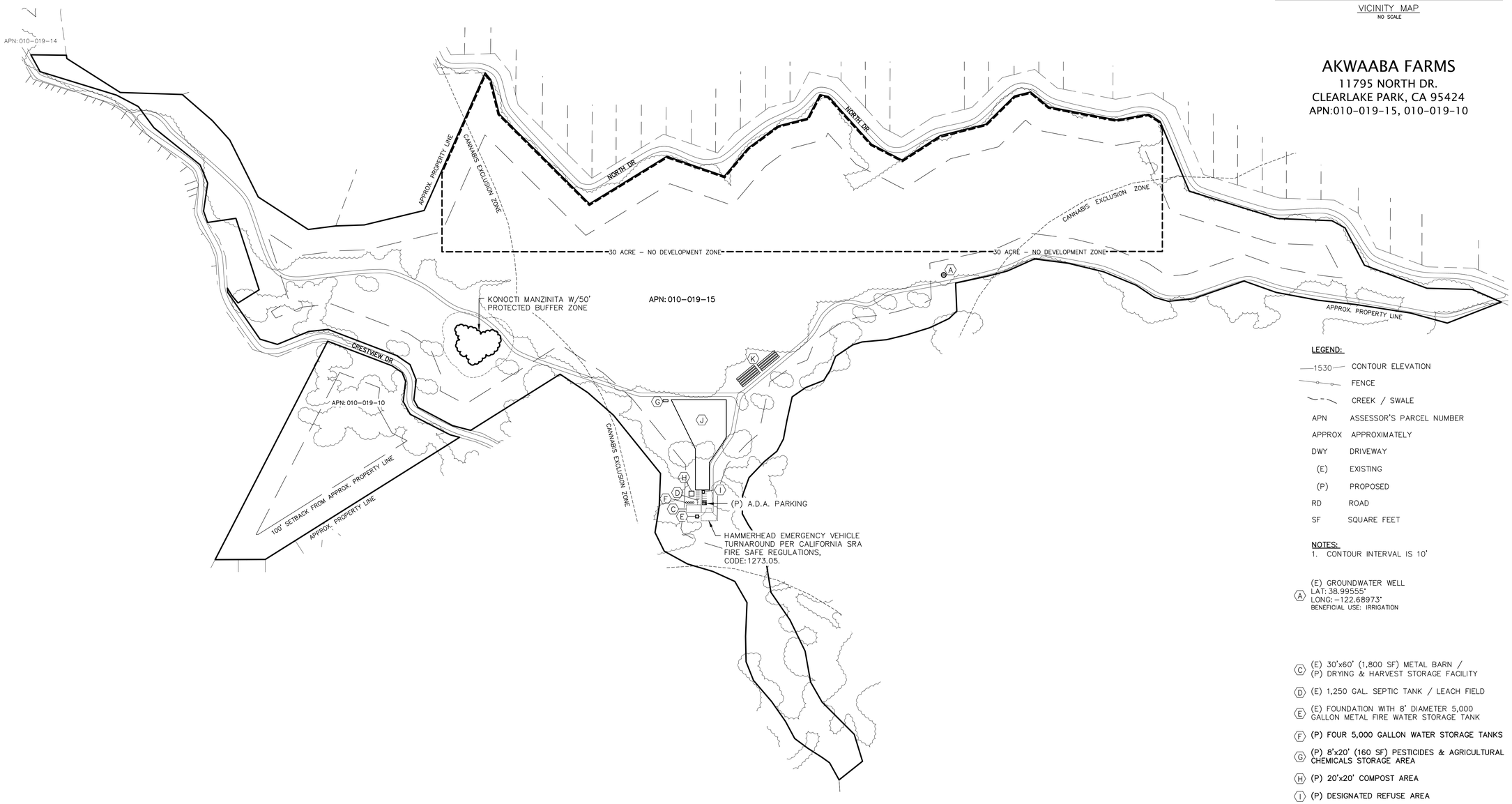

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(F) (P) FOUR 5,000 GALLON WATER STORAGE TANKS

(G) (P) 8'x20' (160 SF) PESTICIDES & AGRICULTURAL CHEMICALS STORAGE AREA

(H) (P) 20'x20' COMPOST AREA

(I) (P) DESIGNATED REFUSE AREA

(J) (P) 43,560 SF OUTDOOR CULTIVATION / CANOPY AREA

(K) (P) NINE 6'x90' (540 SF) MIXED-LIGHT CANOPY AREAS (LOW HOOPS)

PROPOSED CONDITIONS SITE PLAN- PHASE I

GRAPHIC SCALE
200 0 100 200
(IN FEET)
1 inch = 200 ft.

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PROPOSED CONDITIONS SITE PLAN - PHASE I

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CLEARLAKE, CA 95422
LAKE COUNTY

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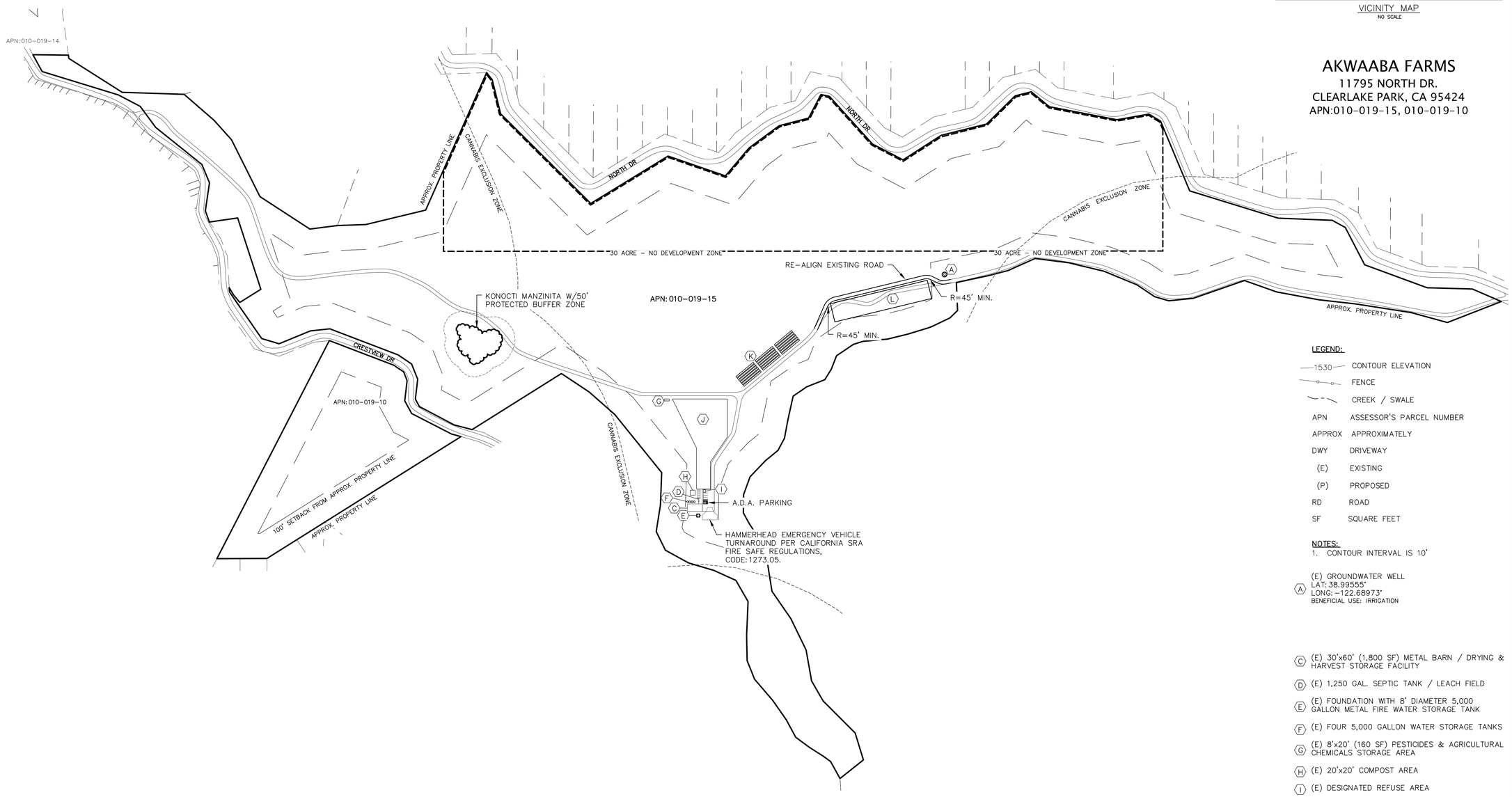

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NO SCALE

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LEGEND:

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	FENCE
	CREEK / SWALE
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
DWY	DRIVEWAY
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(K) (P) EIGHTEEN 6'X90' (540 SF) MIXED-LIGHT CANOPY AREAS (LOW HOOPS)

(L) (P) 75'X400' (30,000 SF) OUTDOOR CULTIVATION / CANOPY AREA

PROPOSED CONDITIONS SITE PLAN– PHASE II

GRAPHIC SCALE
200 0 100 200
(IN FEET)
1 inch = 200 ft.

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PROPOSED CONDITIONS SITE PLAN - PHASE II

APNs:010-019-15, 010-019-10 & 010-019-14
11795 NORTH DRIVE
CLEARLAKE, CA 95422
LAKE COUNTY

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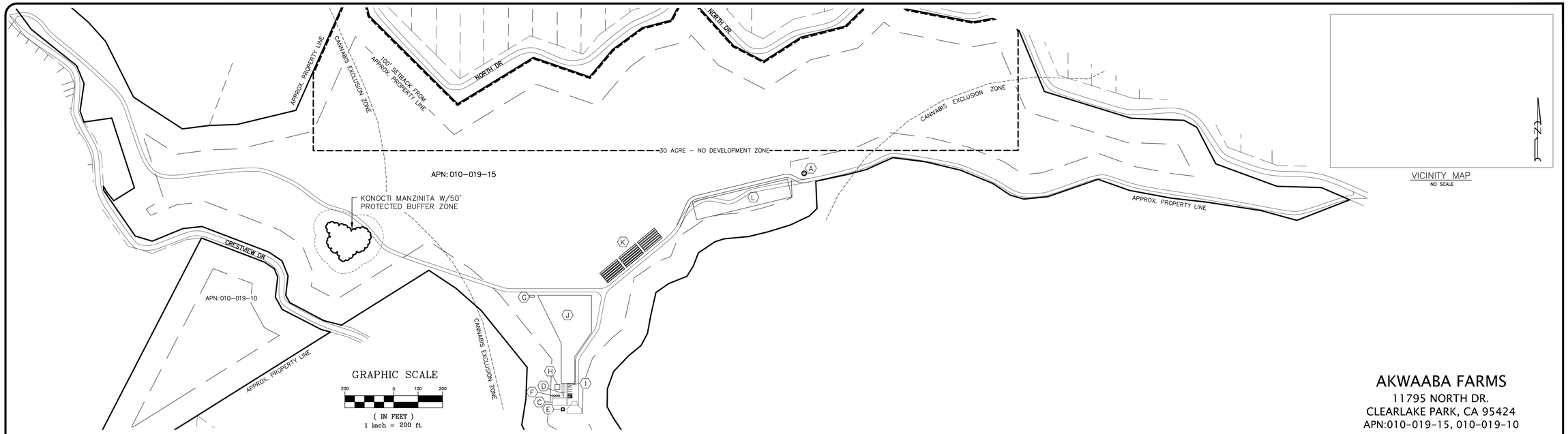

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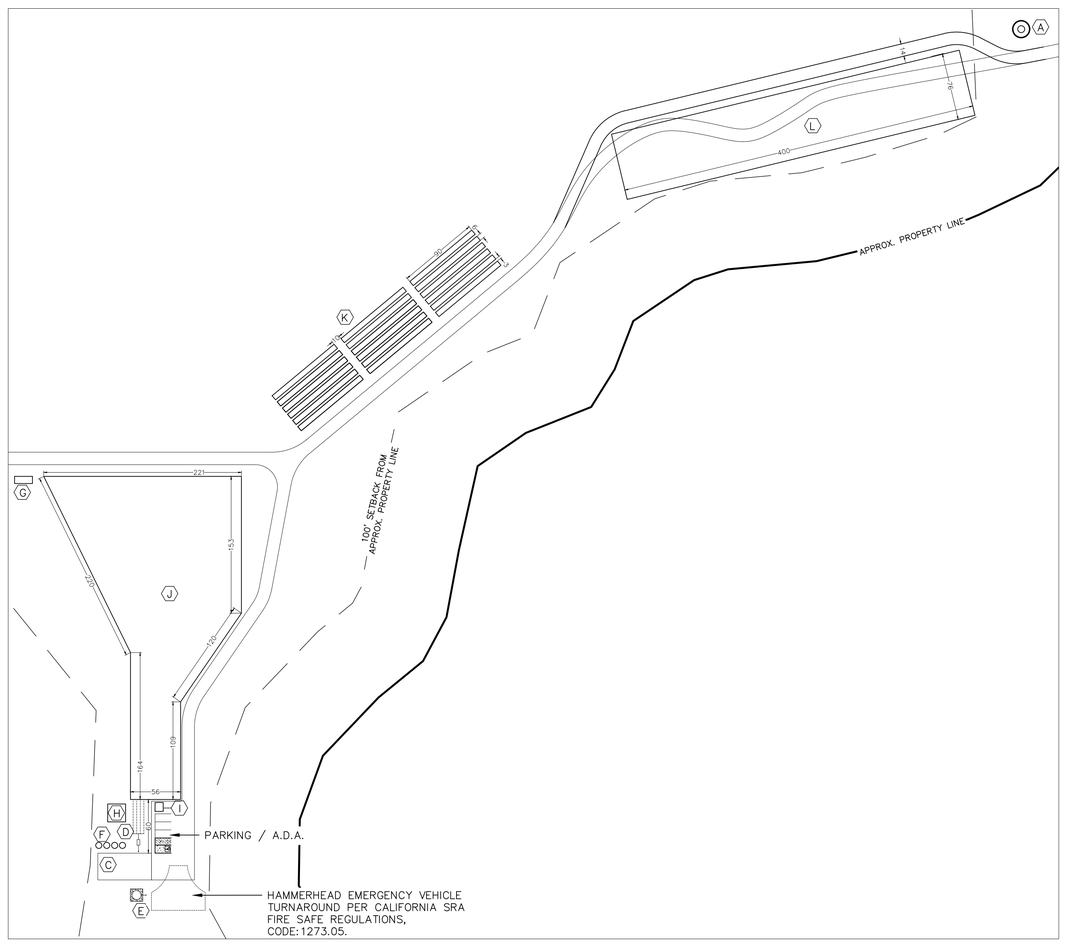

CULTIVATION SITE PLAN WITH CANOPY

GRAPHIC SCALE
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(IN FEET)
1 inch = 80 ft.

LEGEND:

1530	CONTOUR ELEVATION
	FENCE
	CREEK / SWALE
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
DWY	DRIVEWAY
(E)	EXISTING
(P)	PROPOSED
RD	ROAD
SF	SQUARE FEET

NOTES:
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LAKE COUNTY

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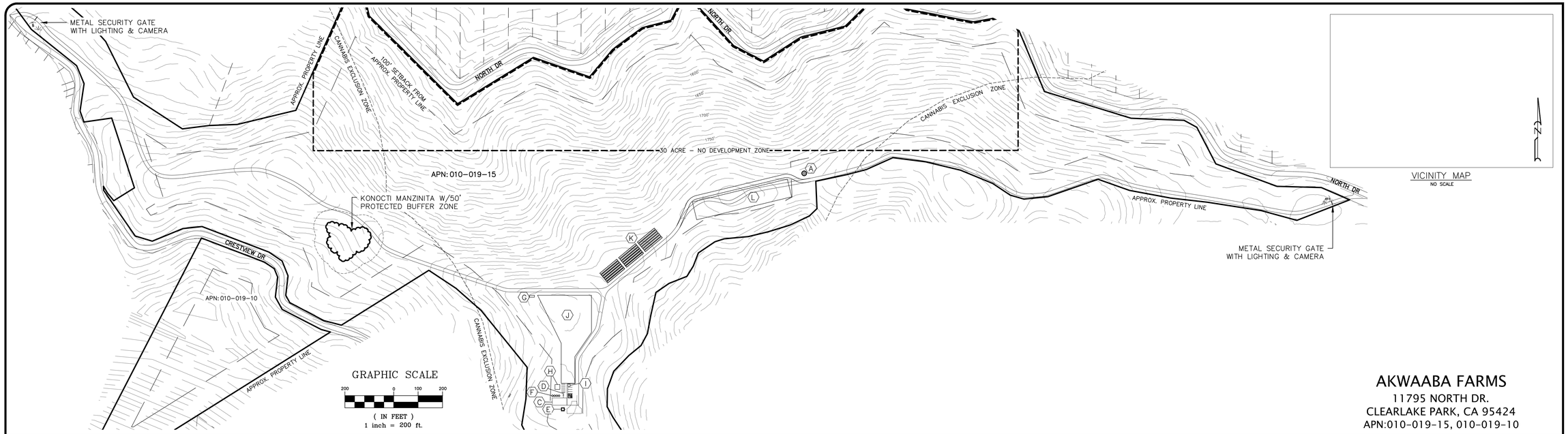

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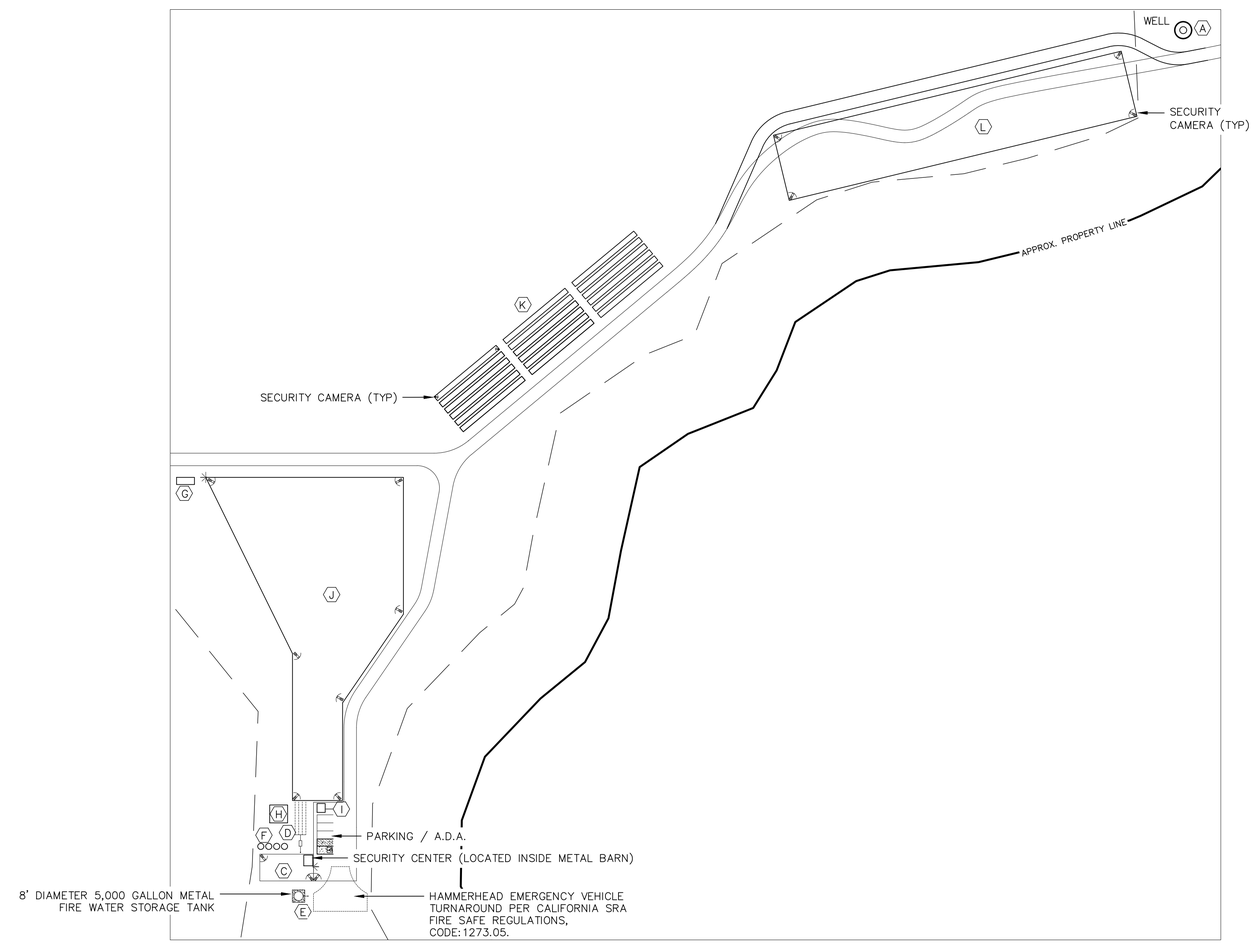

SECURITY SITE PLAN

GRAPHIC SCALE
80 0 40 80
(IN FEET)
1 inch = 80 ft.

LEGEND:

1530	CONTOUR ELEVATION
	FENCE
	CREEK / SWALE
	(P) SECURITY CAMERA
	(P) SECURITY LIGHTING
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
DWY	DRIVEWAY
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SECURITY SITE PLAN

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11795 NORTH DRIVE
CLEARLAKE, CA 95422
LAKE COUNTY

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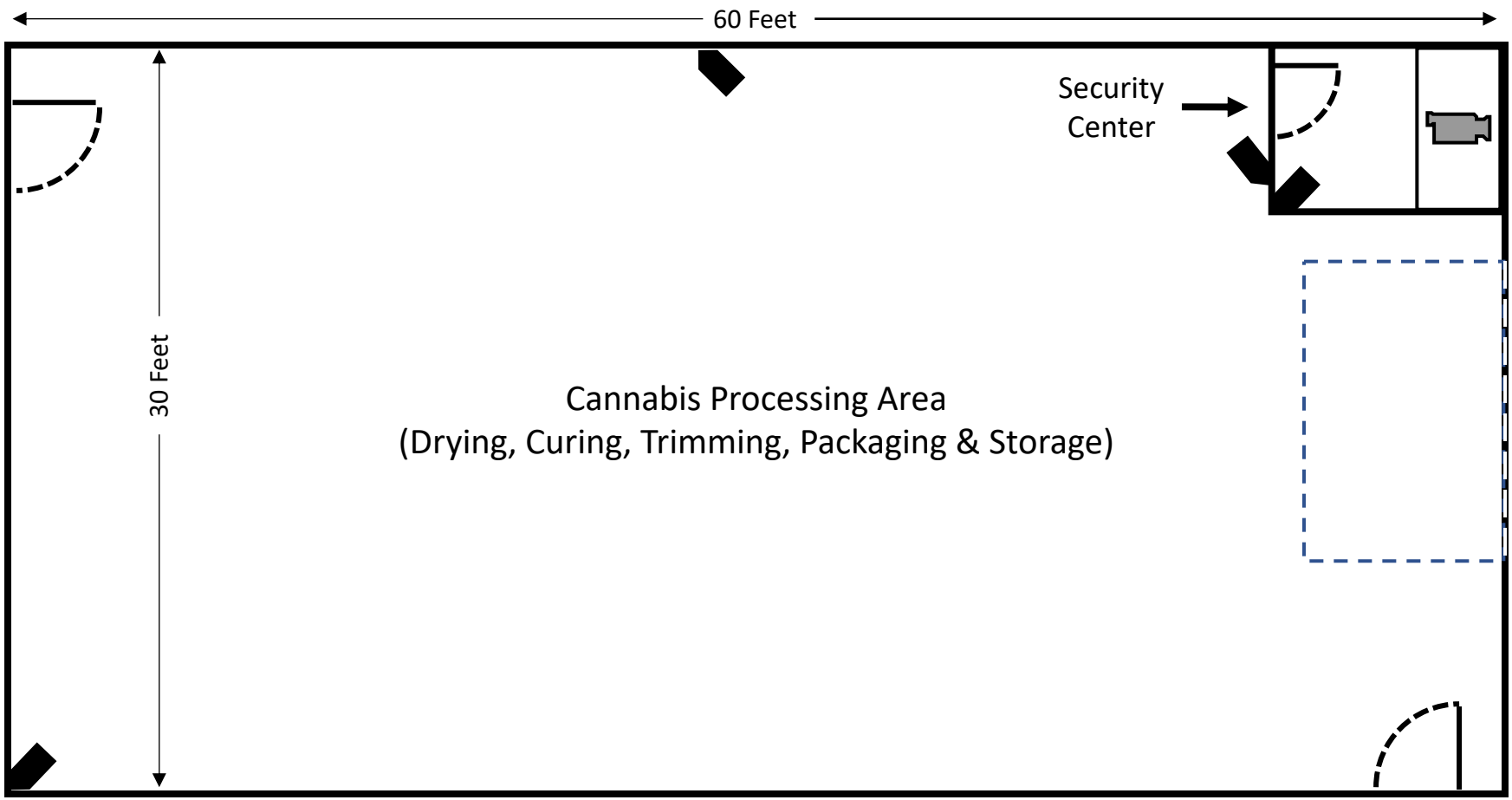
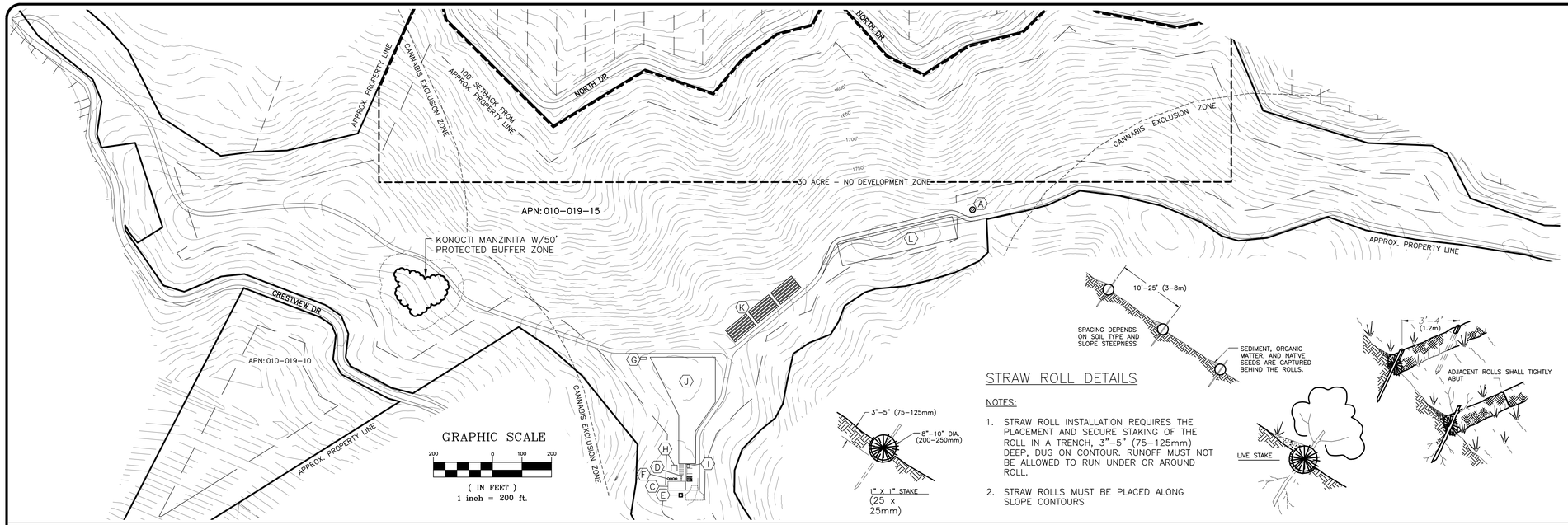
Proposed Processing Facility/Building Layout

(Existing Metal Barn)



Waterproof Surveillance Cameras with 1080p resolution and a 90° field of view. (Arrow indicates direction of view)

Video Surveillance Monitoring and Recording Station



EROSION & SEDIMENT CONTROL NOTES:

1. CONTRACTOR IS TO IMPLEMENT BEST MANAGEMENT PRACTICES (BMPS) TO CONTROL EROSION CONTROL AND REDUCE THE OFF-SITE DISCHARGE OF SEDIMENT TO THE MAXIMUM EXTENT PRACTICABLE.
2. EROSION CONTROL BMPS SHALL BE IN PLACE AND MAINTAINED ALL YEAR ROUND.
3. HE CONTRACTOR SHALL FOLLOW THE GUIDELINES FROM THE "CALIFORNIA STORMWATER BMP HANDBOOK" FOR THE MEASURES SHOWN OR STATED ON THESE PLANS.
4. CONTRACTOR MUST ENSURE THAT THE CONSTRUCTION SITE IS PREPARED PRIOR TO THE ONSET OF ANY STORM.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE QUALIFIED SWPPP PRACTITIONER (QSP).
6. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO ANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF OR AT THE DIRECTION OF A REPRESENTATIVE OF LAKE COUNTY.
7. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED BEFORE AND AFTER ALL STORMS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
8. CONTRACTOR SHALL MAINTAIN A LOG AT THE SITE OF ALL INSPECTIONS OR MAINTENANCE OF BMPS, AS WELL AS, ANY CORRECTIVE CHANGES TO THE BMPS OR EROSION AND SEDIMENT CONTROL PLAN.
9. THE CONTRACTOR SHALL INSTALL THE STABILIZED CONSTRUCTION ENTRANCE PRIOR TO COMMENCEMENT OF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCE.
10. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE SWEPT AT THE END OF EACH WORKING DAY OR AS NECESSARY.
11. ANY LOOSE GROUND FROM EXCAVATING GRADING OPERATIONS SHALL BE SECURED PRIOR TO ANY RAIN EVENT. STRAW OR TARP ALL DISTURBED OR EXCAVATED GROUND.
12. CONTRACTOR SHALL PLACE GRAVEL BAGS AROUND ALL NEW DRAINAGE STRUCTURE OPENINGS IMMEDIATELY AFTER THE STRUCTURE OPENING IS CONSTRUCTED. THESE GRAVEL BAGS SHALL BE MAINTAINED AND REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED.
13. AS A MINIMUM, ALL GRADED AREAS AND EXPOSED SOIL WITHIN THE PROJECT SHALL BE SEEDED PER THE REQUIREMENTS OF LAKE COUNTY.
14. DUST GENERATION MUST BE MINIMIZED AND A WATER TRUCK MUST BE AVAILABLE ON-SITE FOR ADEQUATE DUST CONTROL.

STRAW ROLL DETAILS

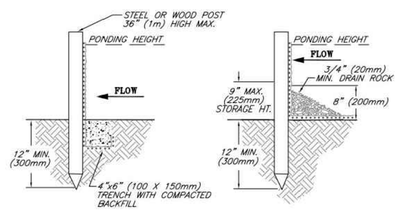
NOTES:

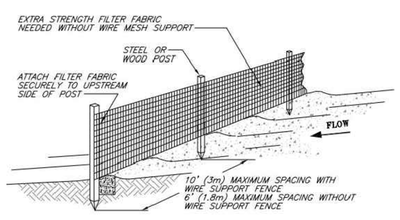
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"–5" (75–125mm) DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
2. STRAW ROLLS MUST BE PLACED ALONG SLOPE CONTOURS

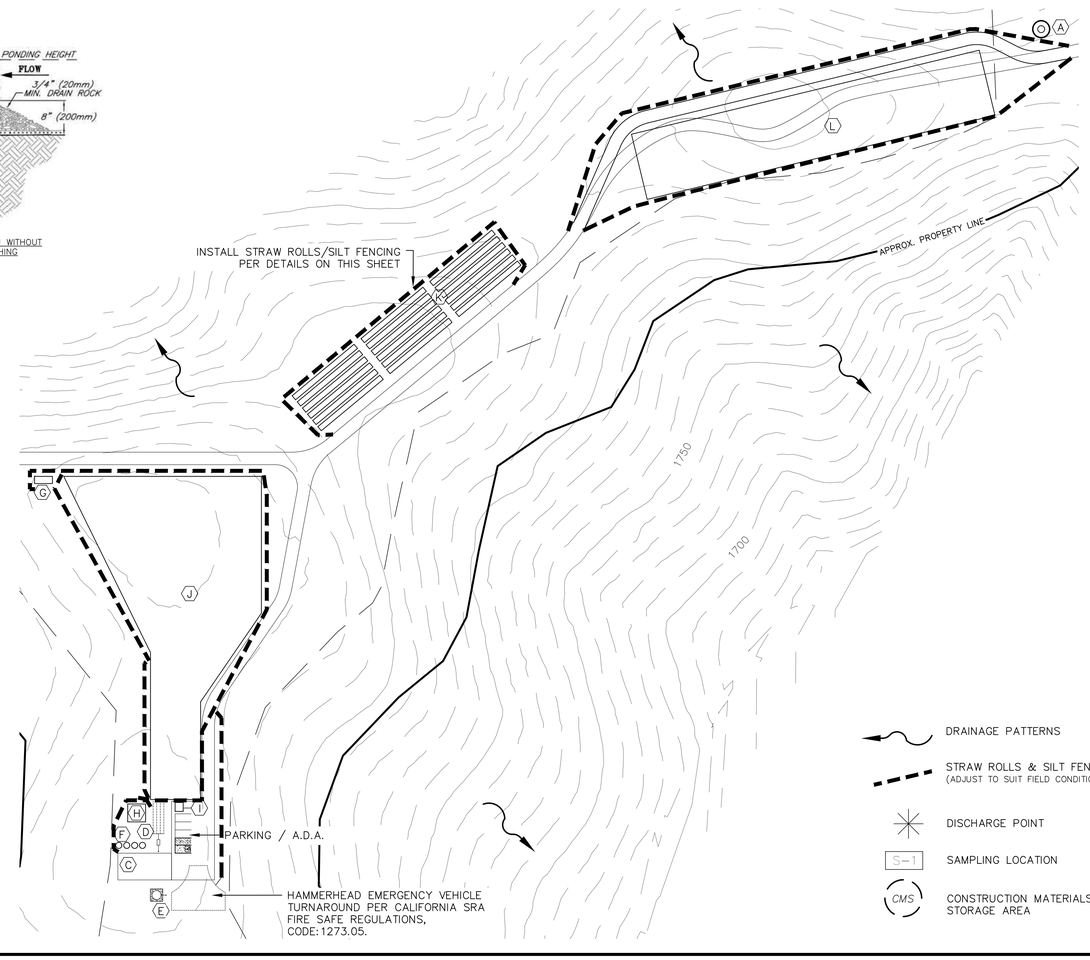
SILT FENCE DETAILS

NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT & REPAIR FENCE AFTER EACH STORM EVENT & REMOVE SEDIMENT WHEN NECESSARY.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.







AKWAABA FARMS

11795 NORTH DR.
CLEARLAKE PARK, CA 95424
APN:010-019-15, 010-019-10

LEGEND:

1530	CONTOUR ELEVATION
	FENCE
	CREEK / SWALE
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
DWY	DRIVEWAY
(E)	EXISTING
(P)	PROPOSED
RD	ROAD
SF	SQUARE FEET

NOTES:
1. CONTOUR INTERVAL IS 10'

(A) (E) GROUNDWATER WELL
LAT: 38.99555°
LONG: –122.68973°
BENEFICIAL USE: IRRIGATION

(C) (E) 30'x60' (1,800 SF) METAL BARN / DRYING & HARVEST STORAGE FACILITY

(D) (E) 1,250 GAL. SEPTIC TANK / LEACH FIELD

(E) (E) FOUNDATION WITH 8' DIAMETER 5,000 GALLON METAL FIRE WATER STORAGE TANK

(F) (E) FOUR 5,000 GALLON WATER STORAGE TANKS

(G) (E) 8'x20' (160 SF) PESTICIDES & AGRICULTURAL CHEMICALS STORAGE AREA

(H) (E) 20'x20' COMPOST AREA

(I) (E) DESIGNATED REFUSE AREA

(J) (E) 43,560 SF OUTDOOR CULTIVATION / CANOPY AREA

(K) (E) EIGHTEEN 6'X90' (540 SF) MIXED-LIGHT CANOPY AREAS (LOW HOOPS)

(L) (E) 75'X400' (30,000 SF) OUTDOOR CULTIVATION / CANOPY AREA

DRAINAGE PATTERNS

STRAW ROLLS & SILT FENCES (ADJUST TO SUIT FIELD CONDITIONS)

DISCHARGE POINT

S-1 SAMPLING LOCATION

CMS CONSTRUCTION MATERIALS STORAGE AREA

EROSION & SEDIMENT CONTROL PLAN

GRAPHIC SCALE
80 0 40 80
(IN FEET)
1 inch = 80 ft.

Revisions:

REALM ENGINEERING
CIVIL ENGINEERING, SURVEYING & PLANNING
1767 MARKET STREET SUITE c
REDDING, CA. 96001
530-526-7493

PLANS PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER
JASON B. VINE
No. 67800
exp.06/30/21
CIVIL
STATE OF CALIFORNIA

EROSION & SEDIMENT CONTROL PLAN

APNs:010–019–15, 010–019–10 & 010–019–14
11795 NORTH DRIVE
CLEARLAKE, CA 95422
LAKE COUNTY

PLOTTED BY:	---
DATE PLOTTED:	6/01/21
SCALE OF DRAWING:	SEE PLAN
JOB NUMBER:	
CADD FILE:	
SHEET:	1

SECTION – C

AIR QUALITY MANAGEMENT PLAN

Air Quality Management Plan

Purpose and Overview

Akwaaba, LLC (Akwaaba) is seeking a Major Use Permit from the County of Lake, for a proposed commercial cannabis cultivation operation at 11795 North Drive near Clearlake Park, California on Lake County APN 010-019-15 (Project Parcel). Akwaaba's proposed cultivation operation will be composed of two A-Type 3 "Medium Outdoor" cultivation areas and an A-Type 2B "Small Mixed-Light" cultivation area (with a total combined cultivation/canopy area of 83,280 ft^2), a 1,800 ft^2 Drying & Harvest Storage Facility (existing metal barn), and a 160 ft^2 Pesticide & Agricultural Chemicals Storage Area (proposed metal shipping/storage container). The proposed cultivation areas will be enclosed with 6-foot tall galvanized woven wire fences, covered with privacy screen/mesh where necessary to screen the cultivation/canopy areas from public view. The growing medium of the proposed outdoor cultivation/canopy areas will be an imported organic soilless growing medium (composed mostly of composted forest material) in aboveground fabric pots. Akwaaba will use drip and micro-spray irrigation systems to deliver irrigation water to the aboveground fabric pots, and to conserve water resources. All water for the proposed cultivation operation will come from the existing onsite groundwater well located at Latitude: 38.99555° and Longitude: -122.68973°.

This Air Quality Management Plan (AQMP) is designed to promote the health, safety, welfare and environmental quality of the community, operational staff, and the Project Property. In-line with the directives of the Lake County Air Quality Management District, this AQMP includes measures to monitor and evaluate the performance of the plan, as well as ensure that all data and information is reported to the County of Lake and the proper local agencies. This AQMP identifies equipment and activities that may cause odor, contaminates, or other air quality hazards, and measures that operational staff will be required to follow to mitigate/minimize the amount of air pollution and particulates generated from the proposed cultivation operation. This AQMP also includes an Odor Response Program that establishes responsible parties and procedures for operational staff to follow in the event of an odor complaint.

Equipment or Activities that May Cause the Issuance of Air Contaminants

The following sources are anticipated to be the most significant emitters of odor, air pollutants, and particles from the proposed cultivation operation. However, no single source or combined sources are anticipated to be harmful or detrimental to neighboring residences or the community of Lake County.

Gasoline and Diesel Powered Equipment: The proposed cultivation operation will generate small amounts of carbon dioxide from the operation of small gasoline engines (tillers, weed eaters, lawnmowers, etc…) and from vehicular traffic associated with staff commuting. The generation of carbon dioxide is partially offset by the cultivation of plants, which remove carbon dioxide in the air for photosynthesis.

Fugitive Dust: The proposed cultivation operation may generate fugitive dust emissions through ground-disturbing activities, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads. Fugitive dust will be controlled by applying gravel or crushed rock to the primary access roads and parking areas of the Project Property, by delaying ground disturbing activities until site conditions are not windy, by wetting soils with a mobile water tank and hose during ground disturbing activities, and by eliminating and/or covering soil stockpiles.

Odors: Cannabis cultivation can generate objectionable odors, particularly when the plants are mature/flowering in the cultivation area(s), or when being processed (drying, curing, trimming) after harvest. No significant odor impacts are anticipated from the proposed cultivation operation, due to the proposed odor control equipment and practices, and the generous setbacks provided from public roads, property lines, and neighboring residences/outdoor activity areas. The ventilation system of the proposed Drying & Harvest Storage Facility, in which the processing of raw cannabis plant material from the proposed cultivation areas will occur, will be equipped with carbon filters/air scrubbers to mitigate odors emanating from the building. Accurate records of repairs and replacements to the ventilation and odor mitigation system will be maintained and retained onsite for at least three years.

Monitoring and Maintenance

All air filtration and odor mitigation equipment of the proposed cultivation operation will be inspected quarterly to determine if maintenance or replacement is required. The carbon filters/air scrubbers of the proposed Drying & Harvest Storage Facility will be replaced each quarter. Akwaaba's managerial staff will log and maintain accurate records, repairs, and replacements to ventilation and odor mitigation systems, and those records will be maintained onsite for at least three years. Akwaaba's managerial staff will review all documentation pertaining to the performance of this AQMP annually, to determine if the risk of nuisance odors or other air contaminants are within acceptable tolerances, or if they can be mitigated further by implementing new best management practices or advanced mechanical systems. All data and information will be made available to Lake County and/or Lake County Air Quality Management District officials upon request.

Odor Response Program

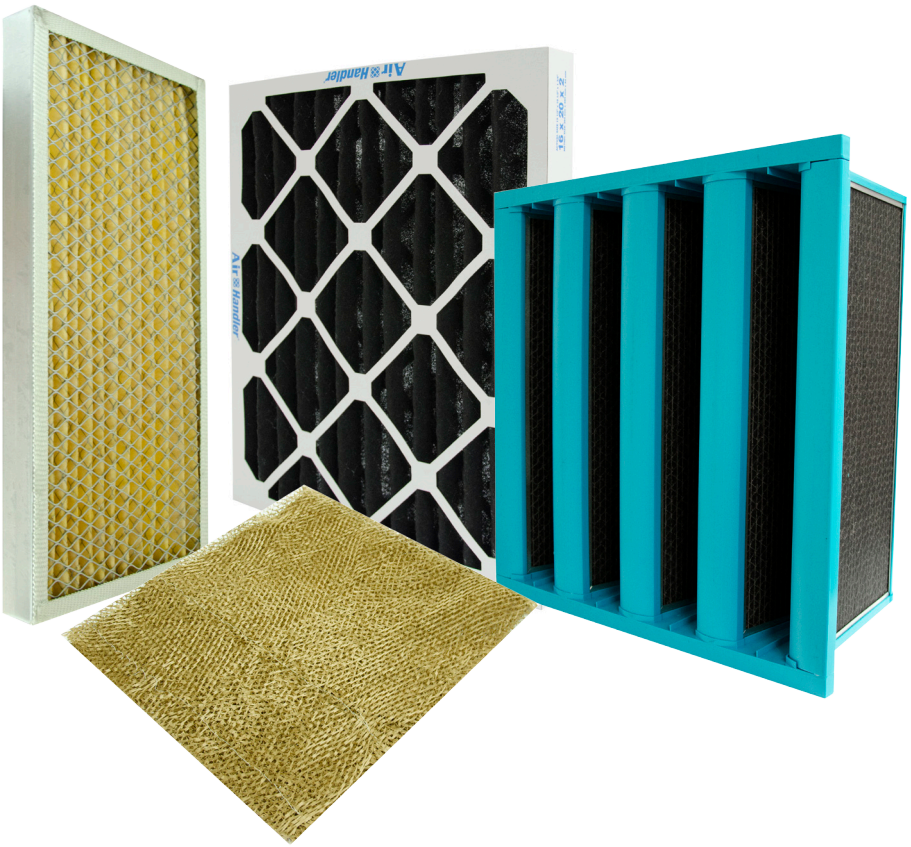
A Community Liaison/Emergency Contact will be made available to Lake County Officials/Staff and the Lake County Sheriff's Office at all times to address any needs or issues that may arise. The Community Liaison/Emergency Contact will be responsible for responding to odor complaints 24 hours a day, seven days a week, including holidays. Akwaaba will provide the name, cell phone number, and email address of the Community Liaison/Emergency Contact to all interested County Departments, Law Enforcement Officials, and neighboring property owners and residents. Akwaaba will encourage neighboring residents to contact the Community Liaison/Emergency Contact to resolve any operating problems before contacting County Officials/Staff.

When an odor complaint is received, the Community Liaison/Emergency Contact will immediately take action to determine the source of the odor for which the complaint was received (cultivation area(s), Drying & Harvest Storage Facility, or other). Then mitigation methods will be immediately implemented to reduce/eliminate odors from emanating from the source. Depending on the source, mitigation measures include erecting windscreens, servicing and/or upgrading existing odor control filtration and ventilation systems, and/or the installation of additional air pollution/odor control equipment.

Community Liaison/Emergency Contact Information

The Community Liaison/Emergency Contact for the proposed cultivation operation is Ms. Angie DeCoux. Ms. DeCoux's cell phone number is (707) 601-1525, and her email address is AkwaabaFarms@gmail.com. There are no residences within 1,000 feet of the proposed Cultivation Operation. The owners of all properties within 250 feet of the Project Parcel will receive Ms. DeCoux's contact information before development of the proposed cultivation operation occurs.

SPECIALTY FILTRATION



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CARBON PLEAT

- Dual purpose: Filters particulate and absorbs odor
- Effective gas phase filter for intermittent gas applications
- Excellent filter to determine if carbon filters will help remove the odor
- Low pressure drop
- Disposable, easy installation, low service cost
- All filters wrapped and sealed in protective plastic bags to maintain filter viability

DESCRIPTION

The Air Handler Carbon Pleat filters are designed for the control of intermittent odor problems. Carbon pleated filters remove a wide range of odors and common indoor air pollutants. The advanced media has improved capability to absorb nuisance odors.

The fitler's construction consists of pleated, non-woven/ polyester media, impregnanted with an activated carbon. The pleated filter pack is enclosed in a heavy duty, moisture resistant (beverage board) die-cut frame that will not crack, warp or distort under normal operating conditions.

BENEFITS

In some light duty applications, the effectiveness of carbon pleated filters can equal many long-term solutions used for controlling odor problems. Carbon pleated filters can be used as a low cost method to verify the potential effectiveness of carbon for controlling odors. The carbon pleat receives an efficient removal of particulate MERV 6 per ASHRAE Standard 52.2-2007.

APPLICATIONS

The Air Handler Carbon Pleat is well suited for use where gas contaminants are low and/ or intermittent. Provides relief of odors created by cigarette smoke, industrial process, copier, pets and musty areas.

These filters are well suited for use in air make-up systems and re-circulation applications in office buildings, hospitals, airports, food courts and manufacturing facilities.

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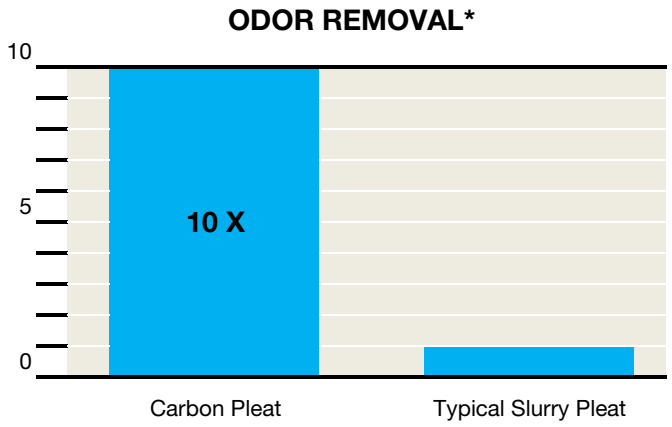
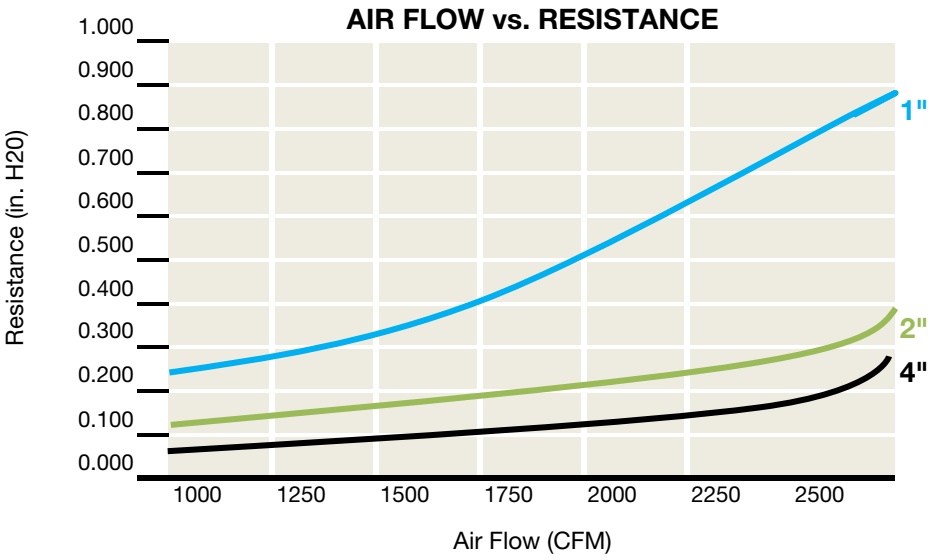
CARBON PLEAT

ODOR REMOVAL



*Amount of gas or odor removed at 50% break through given 880 PPM of Toluene @ 40 (media velocity)



*Results based on 24x24 filter

DIMENSIONS & PART #S

Nominal Size (in.) H	W	D	Initial Resistance @ 250 FPM ("w.g.)	Initial Resistance @ 500 FPM ("w.g.)	Grainger #
10	10	1	0.23	0.63	6B915
10	20	1	0.23	0.63	6B914
12	12	1	0.23	0.63	6B912
12	20	1	0.23	0.63	6B911
12	24	1	0.23	0.63	6B910
14	20	1	0.23	0.63	6B907
14	24	1	0.23	0.63	6B905
14	25	1	0.23	0.63	6B904
15	20	1	0.23	0.63	6B902
16	16	1	0.23	0.63	6B900
16	20	1	0.23	0.63	6B899
16	24	1	0.23	0.63	6B896
16	25	1	0.23	0.63	6B894
18	20	1	0.23	0.63	6B891
18	24	1	0.23	0.63	6B890
18	25	1	0.23	0.63	6B887
20	20	1	0.23	0.63	6B886
20	24	1	0.23	0.63	6B883
20	25	1	0.23	0.63	6B880
22	22	1	0.23	0.63	6B877
24	24	1	0.23	0.63	6B876
25	25	1	0.23	0.63	6B873
10	20	2	0.13	0.34	6B913
12	24	2	0.13	0.34	6B909
14	20	2	0.13	0.34	6B906
14	25	2	0.13	0.34	6B903
15	20	2	0.13	0.34	6B901
16	20	2	0.13	0.34	6B898
16	24	2	0.13	0.34	6B895
16	25	2	0.13	0.34	6B893
18	24	2	0.13	0.34	6B889
20	20	2	0.13	0.34	6B885
20	24	2	0.13	0.34	6B882
20	25	2	0.13	0.34	6B879
24	25	2	0.13	0.34	6B875
25	25	2	0.13	0.34	6B872
12	24	4	0.07	0.23	6B908
16	25	4	0.07	0.23	6B892
20	20	4	0.07	0.23	6B884
20	24	4	0.07	0.23	6B881
20	25	4	0.07	0.23	6B878
24	24	4	0.07	0.23	6B874

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CARBON HONEYCOMB

- Dual function: Odor absorption and particulate filtration
- Granular activated carbon to remove odorous and irritating gaseous contaminants
- Honeycomb construction ensures low air flow resistance
- Effective gas phase filtration in a compact design
- Individually wrapped in plastic

DESCRIPTION

These combination particulate and carbon filters are designed for the control of intermittent odor problems in re-circulated air applications.

Honeycomb style filters are designed to remove a wide range of pollutants. The 1″ honeycomb filters are constructed using 0.5″ honeycomb with a 0.5″ pre-filter pad. The 2″ honeycomb filters are constructed using 0.75″ of honeycomb with a 1″ pre-filter pleat offering medium efficiency.

BENEFITS

The activated carbon presented in the honeycomb filter acts like a porous sponge, collecting and retaining certain chemical compounds on its surface. The ability of activated carbon to absorb a gas or vapor is called its activity.

Carbon used in these filters has a minimum carbon tetrachloride (CCL4) activity of 60% which means it will absorb 60% of its own weight of CCL4 vapor under a standard set of conditions.

Max. Temp. - 150°F

APPLICATIONS

Dual purpose activated Carbon Honeycomb filters are designed to eliminate general odor problems where concentration levels are not extremely heavy. These combination filters offer medium particulate filtration along with an absorbent carbon for fume and odor removal.

The honeycomb style filters are used extensively in office buildings, hospitals, airports, food courts and manufacturing facilities.

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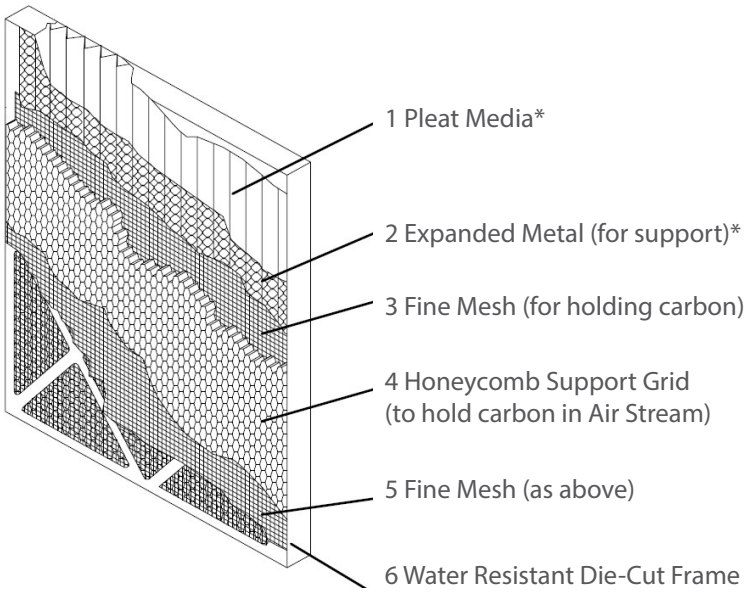
CARBON HONEYCOMB

ODORS REMOVED

- Cooking Odors
- Sewer Odors
- Gasoline Fumes
- Environmental Tobacco Smoke
- Most Volatile Organic Compound (VOC) Odors

FILTER ADVANCEMENTS



*NOTE: for 1″ version a poly pad and no expanded metal replace the pleat media

DIMENSIONS & PART #S

0.5" POLY PRE-FILTER

50% Carbon Fill (with Pre-Filter)			
H	W	D	Grainger #
10	10	1	6B869
10	20	1	6B868
12	12	1	6B866
12	20	1	6B865
12	24	1	6W735
14	20	1	6B864
14	24	1	6B862
14	25	1	6B861
15	20	1	6B859
16	16	1	6B857
16	20	1	6W736
16	24	1	6B856
16	25	1	6W737
18	20	1	6B854
18	24	1	6B853
18	25	1	6B851
20	20	1	6W738
20	24	1	6B850
20	25	1	6W739
22	22	1	6B848
24	24	1	6W740
25	25	1	6B847

1" PLEATED PRE-FILTER

50% Carbon Fill (with Pre-Filter)			
H	W	D	Grainger #
10	20	2	6B867
12	24	2	6W741
14	20	2	6B863
14	25	2	6B860
15	20	2	6B858
16	20	2	6W742
16	24	2	6B855
16	25	2	6W743
18	24	2	6B852
20	20	2	6W744
20	24	2	6B849
20	25	2	6W754
24	24	2	6W746
25	25	2	6B846

0.5" POLY PRE-FILTER

			50% Carbon Fill (No Pre-Filter)	100% Carbon Fill (No Pre-Filter)	100% Carbon Fill (with Pre-Filter)
H	W	D	Grainger #	Grainger #	Grainger #
10	20	1	2JTW5	2JUA5	2JTR1
12	24	1	2JTW7	2JTR3	2JUT6
14	20	1	2JTW9	2JUA7	2JTR5
14	25	1	2JTX2	2JUA9	2JTR7
15	20	1	2JTX4	2JUC2	2JTR9
16	20	1	2JTX6	2JUC4	2JTT2
16	25	1	2JTX8	2JUC6	2JTT4
20	20	1	2JTY7	2JUC8	2JTT6
20	25	1	2JTY1	2JUD1	2JTT8
24	24	1	2JTY3	2GJD5	2JTU1
25	25	1	2JTY5	2JUD3	2JTU3

1" PLEATED PREFILTER

H	W	D	Grainger #	Grainger #	Grainger #
12	24	2	2GJD9	2JUD5	2JTU5
16	20	2	2JTY9	2JUD7	2JTU7
16	25	2	2JTZ2	2JUD9	2JTU9
18	24	2	2JTZ4	2JUF2	2JTV2
20	20	2	2JTZ6	2JUF4	2JTV4
20	24	2	2JTZ8	2JUF6	2JTV6
20	25	2	2JUA1	2JUF8	2JTV8
24	24	2	2GJE4	2JTD2	2JTW1
25	25	2	2JUA3	2JUH1	2JTW3

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FP GAS PHASE

- Improve indoor air quality through effective removal of contaminants, odors and gases
- Available with activated carbon for adsorption, potassium permanganate for chemisorption, or a 50/50 blend of both
- 100% fill for maximum single pass efficiency and longer service life

DESCRIPTION

The Air Handler FP Gas Phase filter is designed to remove a wide range of odors and common indoor air pollutants at high air flows. Constructed of heavy-duty galvanized steel and plastic, with 3/4" honeycomb media packs, the FP Gas Phase filter can be willed with one of two media or a blend of the two to fit any application.

BENEFITS

The FP Gas Phase filter provides effective odor removal with just a moderate increase in pressure drop.

Using 60% CTC activated carbon, potassium permanganate on zeolite, or a blend of the two, the FP Gas Phase filter removes a broad spectrum of compounds including Volatile Organic Compounds (VOC's), vehicle exhaust, sulfur compounds, ammonia and formaldehyde.

APPLICATIONS

These filters are used in commercial and industrial applications when odors and gases need to be removed to protect people, processes, equipment or artifacts.

With a standard header, it can be used in existing HVAC systems, easily retrofitted or specified for new construction. The dual direction design allows for a front or reverse mount installation, without a reduction in filter performance.

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FP GAS PHASE

DIMENSIONS & PERFORMANCE DATA

ACTIVATED CARBON (100%)			
Contaminants Removed by Activated Carbon			
Acetone	Gasoline	Naphtha	Perchloroethylene
Nitrobenzene	Pyridine	Chlorobenzene	Methyl Chloroform
Chloroform	Paint Fumes	Toluene	Methyl Ethyl Ketone
Benzene	Ozone	Styrene	Methylene Chloride

H	W	D	Initial Resistance @ 500 FPM ("w.g.)	Media Weight	Shipping Weight	Grainger #
12	24	12	0.51	11	16	2GGY7
20	24	12	0.51	20	27	2GGZ2
24	24	12	0.51	32	32	2GGV7

POTASSIUM PERMANGANATE (100%)			
Contaminants Removed by Potassium Permanganate Impregnated Media			
Acetylene	Amines	Mercaptans	Nitrogen Oxides
Alcohols	Ammonia	Sulfur Oxides	

H	W	D	Initial Resistance @ 500 FPM ("w.g.)	Media Weight	Shipping Weight	Grainger #
12	24	12	0.36	14	19	2GHA1
20	24	12	0.36	26	33	2GHA5
24	24	12	0.36	32	40	2GHA9

ACTIVATED CARBON / POTASSIUM PERMANGANATE BLEND (100%)			
Contaminants Removed by Activated Carbon / Potassium Permanganate Blend			
Acetic Acid	Cooking Odors	Butyric Acid	Chlorine Dioxide
Urea	Chlorine	Isoproanol	Sodium Thiosulfate
Trichloroethylene	Auto Exhaust	Tobacco Smoke	Cleaning Compounds
Animal Odors	Diesel Fumes		

H	W	D	Initial Resistance @ 500 FPM ("w.g.)	Media Weight	Shipping Weight	Grainger #
12	24	12	0.36	13	18	2GGY3
20	24	12	0.36	23	30	2GGZ6
24	24	12	0.36	28	37	2GGX8

NESHAP / EPA METHOD 319

The EPA National Emissions Standards for Hazardous Air Pollutants (NESHAP) mandated that a new filtration test method be established to determine the efficiency of a filter to remove hazardous pollutants from paint overspray. The EPA guidelines went into effect on September 1, 1998 and continue to set the standard for paint overspray collection systems today. The test method to determine compliance is Test Method 319.

PREFERRED 1ST STAGE

PAINT FILTER PAD

Paint Filter Pad, Polyester media with ECXL style. The media is multilayered, with finer fiber structures downstream in order to enhance depth loading capacity. The multiple layers will avoid face loading as it captures overspray paint with a downstream tackifier.

APPROVED 2-STAGE SYSTEM

2 POCKET BAG FILTER

The recommended 2-stage system consists of a prefilter paint arrestor pad followed by a two pocket bag filter. This two pocket bag filter exceeds the approved EPA Method 319 testing requirements with or without the prefilter pad. The 2-pocket filter is self-sealing and has self supporting pockets. The Media construction is a multi-layered gradient density structure to maximize paint collection and retention.

APPROVED 3-STAGE SYSTEM

5 POCKET BAG FILTER

The recommended 3-stage system consists of a prefilter pad, a 2 pocket filter bag, followed by the EPA Method 319 approved 5 pocket bag filter. The 5 pocket bag filter is self sealing and exceeds the testing requirements with or without the pre-filter pad and two pocket filter bag. The media construction is multi-layered with the downstream layer consisting of a high efficiency synthetic media.

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NESHAP / EPA METHOD 319

DIMENSIONS & PART #S

Nominal Size (in.)			2-Pocket Bag
H	W	D	Grainger #
20	20	15	4YKR4
20	25	15	4YKR5
24	24	15	4YKR6

Nominal Size (in.)			5-Pocket Bag
H	W	D	Grainger #
20	20	12	4YKR1
20	25	12	4YKR2
24	24	12	4YKR3

PERFORMANCE COMPARISON 2-STAGE FILTER

Liquid Challenge - Oleic Acid			
Particle Size	EPA 319 Requirement	Air Handler Actual	ATI Actual
>2.2um	>10%	55.40%	41%
>4.1um	>50%	81.30%	87%
>5.7um	>90%	92.40%	96%

Solid Challenge - KCl			
Particle Size	EPA 319 Requirement	Air Handler Actual	ATI Actual
>2.2um	>10%	55.40%	41%
>4.1um	>50%	81.30%	87%
>5.7um	>90%	92.40%	96%

Initial dP @ 120 FPM Air Handler - 0.045”

Initial dP @ 120 FPM ATI - 0.13”

PERFORMANCE COMPARISON 3-STAGE FILTER

Liquid Challenge - Oleic Acid			
Particle Size	EPA 319 Requirement	Air Handler Actual	ATI Actual
>0.42um	>65%	83.50%	75%
>1.0um	>80%	95.00%	87%
>2.0um	>95%	99.10%	99%

Solid Challenge - KCl			
Particle Size	EPA 319 Requirement	Air Handler Actual	ATI Actual
>0.70um	>75%	93.80%	88%
>1.1um	>85%	97.80%	92%
>2.5um	>95%	99.50%	98%

Initial dP @ 120 FPM Air Handler - 0.22”

Initial dP @ 120 FPM ATI - 0.28”

The lower initial dP results in longer life and lower operating costs.

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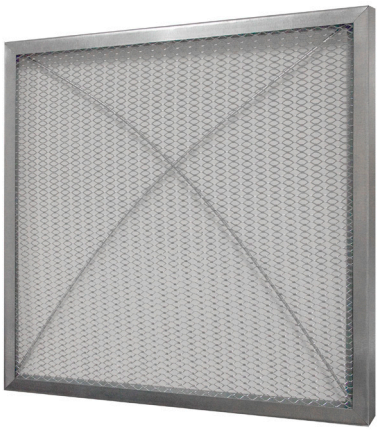
FILTER ACCESSORIES

PAD HOLDING FRAMES

Air Handler Pad Holding Frames are reusable. Permanent pad holding frames are constructed around a 24-gauge steel frame. The downstream side is 16-gauge, 1" x 1" welded wire. A hinged gate makes changing the pad easy, quick and safe.



DIMENSIONS & PART #S

H	W	D	Grainger #
10	10	1	6B730
10	20	1	6B729
12	12	1	5W082
12	20	1	6B727
12	24	1	5W081
14	20	1	6B725
14	25	1	6B723
15	20	1	6B721
16	16	1	6B719
16	20	1	5W080
16	24	1	6B718
16	25	1	5W079
18	18	1	5W078
18	20	1	6B716
18	24	1	5W077
18	25	1	6B714
20	20	1	5W076
20	24	1	6B713

H	W	D	Grainger #
20	25	1	5W075
22	22	1	5W074
24	24	1	5W073
25	25	1	5W083
10	20	2	6B728
12	24	2	6B726
14	20	2	6B724
14	25	2	6B722
15	20	2	6B720
16	20	2	5W072
16	24	2	6B717
16	25	2	5W071
18	24	2	6B715
20	20	2	5W070
20	24	2	6B712
20	25	2	5W069
24	24	2	6B711
25	25	2	6B710

AIR FILTER HOLDING FRAMES

Air Handler Filter Holding Frames are used to construct "built-from-scratch" filter banks for air handling systems. They may be bolted or riveted together utilizing matching holes on frames. Combined with a variety of holding clips, they can accept most 1", 2", 4", 6" and 12" supported filters and non-supporting pocket filters.

H	W	D	Case Qty.	Grainger #
24	24	3	8	6B731
20	24	3	8	6B732
12	24	3	8	6B733

For our complete line of filters, visit grainger.com/airhandler

Find it at Grainger.

Air Handler®

Clear the air. Ease your mind.

FILTER ACCESSORIES

GASKETING FOR AIR FILTERS

Air Handler Filter Gasketing consists of black neoprene foam construction with adhesive backing. Excellent resistant to chemicals, maximum temperature of 220°F. Used to seal filters and avoid air by-pass.

DIMENSIONS & PART #S

W	L	D	Grainger #
13/16"	75'	1/8"	6C523
13/16"	50'	1/4"	6C524

FILTER HOLDING CLIPS

Air Handler Filter Holding Clips keep all types of air filters firmly fastened within frames. Install using hand tools only - no rivets or bolts necessary. See chart below to match air filter to proper clip.

All pigtail clips are galvanized steel and all spring clips are stainless steel.

Case quantity equals 12

DIMENSIONS & PART #S

Clip Style	To Hold	No. Required	Grainger #
1" Pigtail	1" Header	4	5E904
2" Pigtail	2" Filter	2	5E905
3" Pigtail	2" Prefilter to a filter w/ header	4	5E906
4" Pigtail	4" Filter	4	5E907
6" Spring	6" Rigid or Box	4	5E908
12" Spring	12" Rigid or Box	4	5E909

Pigtail Clip

Spring Clip

For our complete line of filters, visit grainger.com/airhandler

Find it at Grainger.

Air Handler®

Clear the air. Ease your mind.

SECTION – D

CULTURAL RESOURCES
EVALUATION
CONFIDENTIAL

SECTION – E

BIOLOGICAL RESOURCES
ASSESSMENT
INCLUDED AS SEPARATE
ATTACHMENT

SECTION – F

GROUNDS MANAGEMENT PLAN

Grounds Management Plan

Purpose and Overview

Akwaaba, LLC (Akwaaba) is seeking a Major Use Permit from the County of Lake, for a proposed commercial cannabis cultivation operation at 11795 North Drive near Clearlake Park, California on Lake County APN 010-019-15 (Project Parcel). Akwaaba's proposed cultivation operation will be composed of three A-Type 2 "Medium Outdoor" cultivation areas and an A-Type 2B "Small Mixed-Light" cultivation area (with a total combined cultivation/canopy area of 83,280 ft^2), a 1,800 ft^2 Drying & Harvest Storage Facility (existing metal barn), and a 160 ft^2 Pesticide & Agricultural Chemicals Storage Area (proposed metal shipping/storage container). The proposed cultivation areas will be enclosed with 6-foot tall galvanized woven wire fences, covered with privacy screen/mesh where necessary to screen the cultivation/canopy areas from public view. The growing medium of the proposed outdoor cultivation/canopy areas will be an imported organic soilless growing medium (composed mostly of composted forest material) in aboveground fabric pots. Akwaaba will use drip and micro-spray irrigation systems to deliver irrigation water to the aboveground fabric pots, and to conserve water resources. All water for the proposed cultivation operation will come from the existing onsite groundwater well located at Latitude: 38.99555° and Longitude: -122.68973°.

This Grounds Management Plan is intended to ensure that the Project Property is well maintained in order to protect the public health, safety and welfare, as well as the natural environment of Lake County. This Grounds Management Plan outlines how Akwaaba's employees will properly store agricultural chemicals and equipment, manage solid waste, maintain roads and defensible space, and prevent the attraction, harborage, and proliferation of pests and diseases due to unsanitary conditions.

Chemicals Storage and Effluent

Chemicals stored and used at/by the proposed cultivation operation include fertilizers/nutrients, pesticides, and petroleum products (Agricultural Chemicals) and chemical sanitation products necessary to maintain a sterile work environment inside the proposed Drying & Harvest Storage Facility. All agricultural chemicals, when not in use, will be stored in their manufacturer's original containers/packaging, undercover, and at least 100 feet from surface water bodies inside the proposed Pesticides and Agricultural Chemicals Storage Area (proposed metal shipping/storage container). Sanitation products will be stored in their manufacturer's original containers/packaging within a secure cabinet inside the proposed Drying & Harvest Storage Facility. Spill containment and cleanup equipment will be maintained within the proposed Pesticides and Agricultural Chemicals Storage Area and Drying & Harvest Storage Facility. No effluent is expected to be produced by the proposed cultivation operation.

Solid Waste Management

The types of solid waste that will be generated from the proposed cultivation operation include gardening materials and wastes (such as used plastic seedling pots and spent plastic fertilizer/pesticide bags and bottles) and general litter from staff/personnel. All solid waste will be stored in bins with secure fitting lids, located directly adjacent to the proposed Drying & Harvest Storage Facility. At no time will the bins be filled to a point that their lids cannot fit securely. Solid waste from the bins will be deposited into a trailer ("dump trailer"), and hauled away to a Lake County Integrated Waste Management facility, at least every seven (7) days/weekly. The Eastlake Landfill is the closest Lake County Integrated Waste Management facility to the project site. Most, if not all, of the solid waste generated by the proposed cultivation operation can and will be deposited at this facility.

Site Maintenance

When not in use, all equipment will be stored in its proper designated area upon completion of the task for which the equipment was needed. Any refuse created during the work day will be placed in the proper waste disposal receptacle at the end of each shift, or at a minimum upon completion of the task assigned. Any refuse which poses a risk for contamination or personal injury will be disposed of immediately. 100 feet of defensible space will be established and maintained around the proposed cultivation operation for fire protection and to ensure safe and sanitary working conditions. Areas of defensible space will be mowed and trimmed regularly around the cultivation operation to provide for visibility and security monitoring. Access roads and parking areas will be graveled to prevent the generation of fugitive dust, and vegetative ground cover will be preserved throughout the entire site to filter and infiltrate stormwater runoff from access roads, parking areas, and the proposed cultivation operation. Staff will have access to the restrooms/washrooms of the proposed Drying & Harvest Storage Facility whenever they are onsite.

Compliance with SRA Fire Safe Regulations

The Project Property is located within the Lake County Fire Protection District and the California Board of Forestry and Fire Protection (CALFIRE) State Responsibility Area (SRA). As such, the proposed cultivation operation must comply with SRA Fire Safe Regulations, and Akwaaba will establish/develop the following improvements to adhere to those regulations. Please see the attached Fire Map for a graphic representation of the existing/proposed improvements referenced below.

Emergency Access and Egress

An existing private gravel and native soil surfaced access road winds through the Project Parcel, connecting North Drive to Crestview Drive through the Project Parcel. The existing access road is 12 to 14 feet wide with less than 16 percent grade. Akwaaba gravel has been applied to the access road's surface for its entire length, so as to establish an aggregate surface capable of supporting fire apparatus weighing at least 75,000 pounds. Akwaaba will also adhere to one direction of travel on the private gravel access road, from North Drive to Crestview Drive (please see the attached "Fire Map"). A 20-foot wide spur road will connect the proposed Drying & Harvest Storage Facility to the private gravel access road. A hammerhead at the end of the 20-foot wide spur road provides adequate emergency vehicle turnaround space.

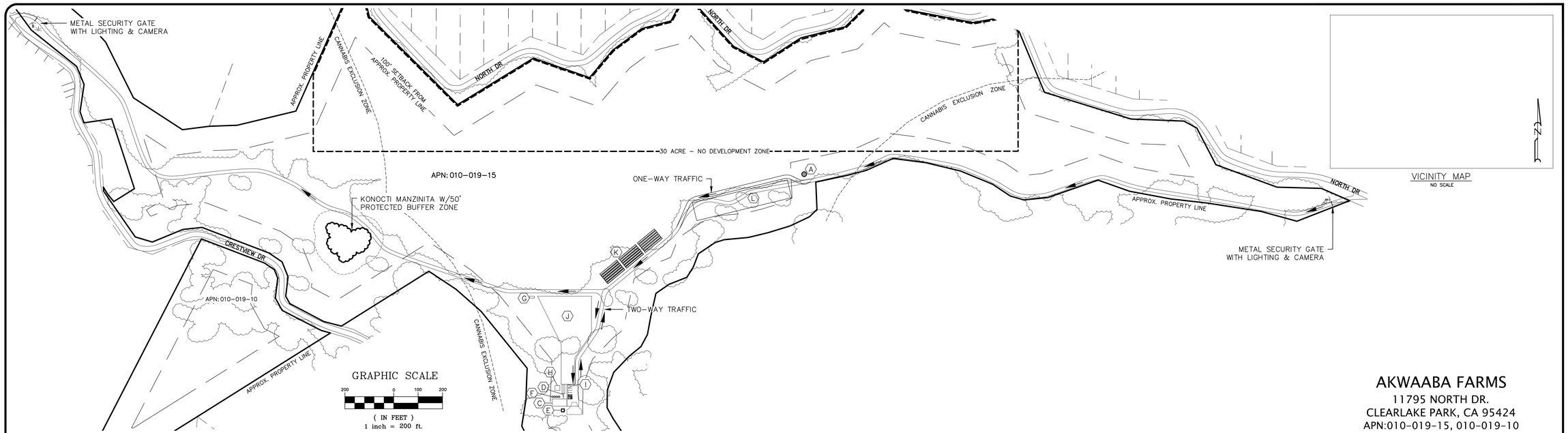
Signing and Building Numbering

The address of the Project Parcel (and the proposed cultivation operation) will be displayed on a metal rectangle mounted to a metal post in a location that is visible and legible from at least 100 feet in both directions from the North Drive and Crestview Drive. The numbers of the address will be reflectorized, of a contrasting color (to the color of the metal rectangle), and have a height of at least 4 inches with 0.5 stroke.

Emergency Water Supply & Defensible Space

Akwaaba will establish a 5,000-gallon metal fire water storage tank adjacent to the proposed Drying & Harvest Storage Facility. The metal fire water storage tank will be connected to a 2-foot high hydrant/fire valve equipped with 4-inch National Hose male thread and cap, located approximately 6 feet west of the spur road used to access the proposed Drying & Harvest Storage Facility (please see the attached "Fire Map"). The location of the hydrant/fire valve will be identified with a +3" reflectorized blue marker mounted to a 4-foot tall/high metal post.

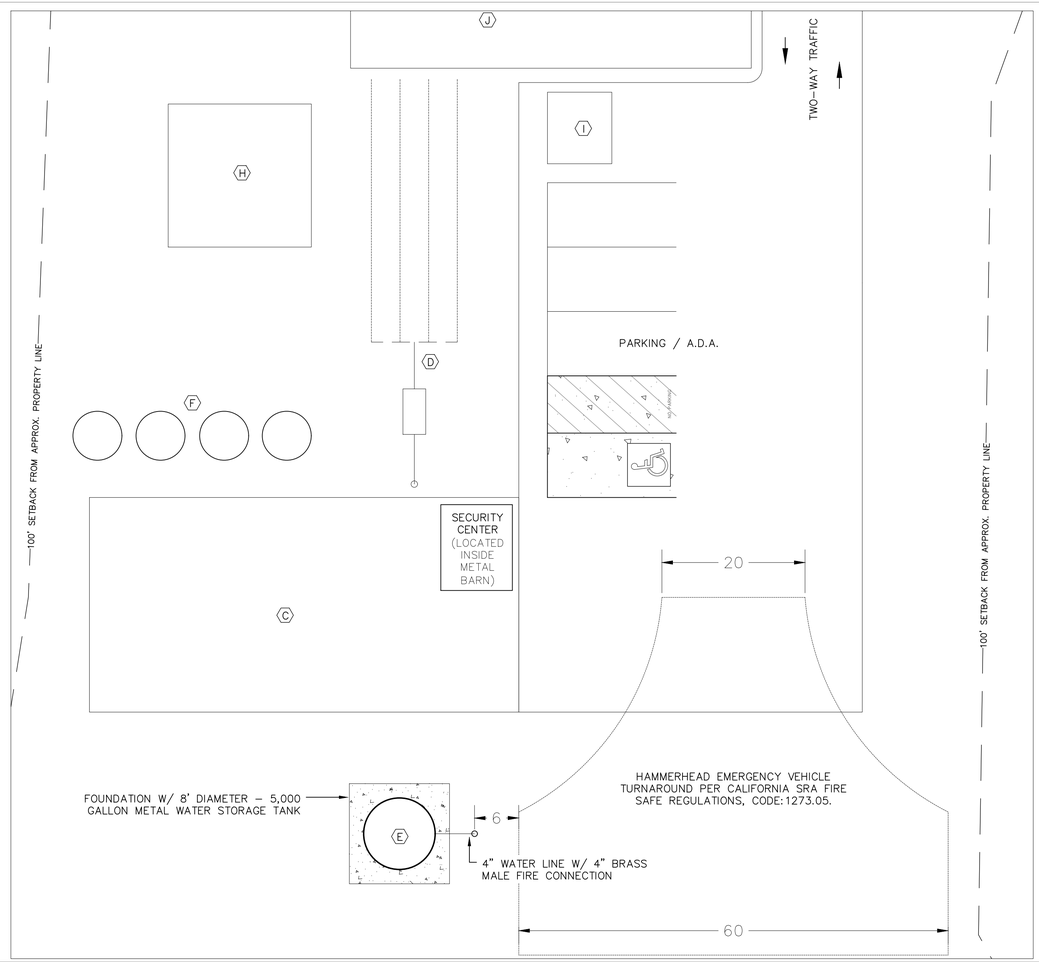
Akwaaba will remove all flammable vegetation within 30 feet of the structures, cultivation areas, and metal fire water storage tank and hydrant/fire valve of the proposed cultivation operation. 100 feet of defensible space will be maintained around the proposed cultivation operation, by regularly mowing grasses to a maximum height of 4 inches, creating and maintaining space between shrubs and trees, and by removing all tree branches and other ladder fuels within 6 feet of the ground surface.



VICINITY MAP
NO SCALE

AKWAABA FARMS

11795 NORTH DR.
CLEARLAKE PARK, CA 95424
APN:010-019-15, 010-019-10



FIRE MAP

GRAPHIC SCALE
10 0 5 10
(IN FEET)
1 inch = 10 ft.

LEGEND:

1530	CONTOUR ELEVATION
	FENCE
	CREEK / SWALE
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
DWY	DRIVEWAY
(E)	EXISTING
(P)	PROPOSED
RD	ROAD
SF	SQUARE FEET

NOTES:
1. CONTOUR INTERVAL IS 10'

(A) (E) GROUNDWATER WELL
LAT: 38.99555°
LONG: –122.68973°
BENEFICIAL USE: IRRIGATION

(C) (E) 30'x60' (1,800 SF) METAL BARN / DRYING & HARVEST STORAGE FACILITY

(D) (E) 1,250 GAL. SEPTIC TANK / LEACH FIELD

(E) (E) FOUNDATION WITH 8' DIAMETER 5,000 GALLON METAL FIRE WATER STORAGE TANK

(F) (E) FOUR 5,000 GALLON WATER STORAGE TANKS

(G) (E) 8'x20' (160 SF) PESTICIDES & AGRICULTURAL CHEMICALS STORAGE AREA

(H) (E) 20'x20' COMPOST AREA

(I) (E) DESIGNATED REFUSE AREA

(J) (E) 43,560 SF OUTDOOR CULTIVATION / CANOPY AREA

(K) (E) EIGHTEEN 6'X90' (540 SF) MIXED–LIGHT CANOPY AREAS (LOW HOOPS)

(L) (E) 75'X400' (30,000 SF) OUTDOOR CULTIVATION / CANOPY AREA

Revisions:

REALM ENGINEERING
CIVIL ENGINEERING, SURVEYING & PLANNING
1767 MARKET STREET SUITE c
REDDING, CA. 96001
530-526-7493

PLANS PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER
JASON B. VINE
No. 67800
exp.06/30/21
CIVIL
STATE OF CALIFORNIA

FIRE MAP

APNs:010–019–15, 010–019–10 & 010–019–14
11795 NORTH DRIVE
CLEARLAKE, CA 95422
LAKE COUNTY

PLOTTED BY:	--- --- ---
DATE PLOTTED:	6/01/21
SCALE OF DRAWING:	SEE PLAN
JOB NUMBER:	
CADD FILE:	
SHEET:	1

SECTION – G

SECURITY MANAGEMENT PLAN

Security Management Plan

Purpose and Overview

Akwaaba, LLC (Akwaaba) is seeking a Major Use Permit from the County of Lake, for a proposed commercial cannabis cultivation operation at 11795 North Drive near Clearlake Park, California on Lake County APN 010-019-15 (Project Parcel). Akwaaba's proposed cultivation operation will be composed of three A-Type 2 "Medium Outdoor" cultivation areas and an A-Type 2B "Small Mixed-Light" cultivation area (with a total combined cultivation/canopy area of 83,280 ft^2), a 1,800 ft^2 Drying & Harvest Storage Facility (existing metal barn), and a 160 ft^2 Pesticide & Agricultural Chemicals Storage Area (proposed metal shipping/storage container). The proposed cultivation areas will be enclosed with 6-foot tall galvanized woven wire fences, covered with privacy screen/mesh where necessary to screen the cultivation/canopy areas from public view. The growing medium of the proposed outdoor cultivation/canopy areas will be an imported organic soilless growing medium (composed mostly of composted forest material) in aboveground fabric pots. Akwaaba will use drip and micro-spray irrigation systems to deliver irrigation water to the aboveground fabric pots, and to conserve water resources. All water for the proposed cultivation operation will come from the existing onsite groundwater well located at Latitude: 38.99555° and Longitude: -122.68973°.

The purpose of this Security Management Plan (SMP) is to minimize criminal activity, provide for safe and secure working environments, protect private property and prevent damage to the environment. This SMP includes a description of the security measures that will be implemented at/by the proposed cultivation operation to prevent unauthorized access and theft or diversion of cannabis, a description of the proposed video surveillance system, and protocols that will be followed to ensure overall site security. This SMP is also designed to be compliant with the regulations for cannabis cultivation authored by the CDFA's CalCannabis Licensing program, as well as the regulations established by the California Bureau of Cannabis Control for state-licensed cannabis businesses.

Secured Entry and Access

A private gravel and native soil surfaced access road winds through the Project Parcel, connecting North Drive to Crestview Drive through the Project Parcel. Metal gates will control access to the private access roads of the Project Parcel from North Drive and Crestview Drive. All gates will be closed and locked outside of core operating/business hours (8am to 6pm) and whenever Akwaaba's managerial staff are not present.

6-foot woven wire fences will be erected around the proposed cultivation/canopy areas. Privacy Screen/Cloth will be installed on the fences where necessary to screen the cultivation area from public view. Posts will be set into the ground at not more than 10-foot intervals, and terminal posts will be set into concrete footings. Secured entry and access to the cultivation area(s) will be controlled via locking gates that will be locked whenever Akwaaba's managerial staff are not

present. All gates will be secured with heavy duty chains and commercial grade padlocks. Only approved managerial staff will be able to unlock the gates of the Project Parcel.

100 feet of defensible space (vegetation management) will be established and maintained around the proposed cultivation areas and associated facilities for fire protection and to provide for visibility and security monitoring. Motion-sensing alarms and security lights will be installed at the metal gates controlling access to the proposed cultivation operation, to alert personnel when someone/something has entered onto the premises. Motion-sensing security lights will be installed on all external corners of the proposed cultivation areas. All lighting will be fully shielded, downward casting and will not spill over onto other properties or the night sky.

Personnel will be instructed to notify managerial staff immediately if/when suspicious activity is detected. Akwaaba's managerial staff will investigate the suspicious activity for potential threats, issues, or concerns. Akwaaba's managerial staff will contact the Lake County Sheriff's Office immediately if/when a threat is detected. When a visitor arrives at the proposed cultivation operation via the main entrance during core operating/business hours, they will be immediately greeted by a member of Akwaaba's managerial staff. The staff member will verify the visitor's identification and appropriate documentation/credentials. They will then be assigned an escort to show the visitor to the appropriate area(s), in accordance to their approved itinerary. No visitors will ever be left unattended.

Video Surveillance

Akwaaba will use a color capable closed-circuit television (CCTV) system with a minimum camera resolution of 1080p at a minimum of 30 frames per second to record activity in all sensitive areas. All cameras will equipped with motion sensing technology to activate the cameras when motion is detected, and all cameras (exterior and interior) will be waterproof. The CCTV system will feed into a Monitoring and Recording Station inside the Security Room within the proposed Drying & Harvest Storage Facility, where video from the CCTV system will be digitally recorded. Video recordings will display the current date and time, and all recordings will be kept a minimum of 90 days, and 7 years for any corresponding reported incidents caught on tape. Video management software of the Monitoring and Recording Station will be capable of supporting remote access, and will be equipped with a failure notification system that immediately notifies Akwaaba's managerial staff of any interruptions or failures. All sensitive areas covered by the video surveillance system will have adequate lighting to illuminate the camera's field of vision.

Proposed camera placements can be found on the accompanying Security Site Plan. Areas that will be covered by the CCTV system include:

- Perimeter of the proposed cultivation/canopy areas;
- Interior and exterior of all entryways and exits to the proposed Drying & Harvest Storage Facility; and
- Interior of each room of the proposed Drying & Harvest Storage Facility, including the proposed the Security Center.

Diversion/Theft Prevention

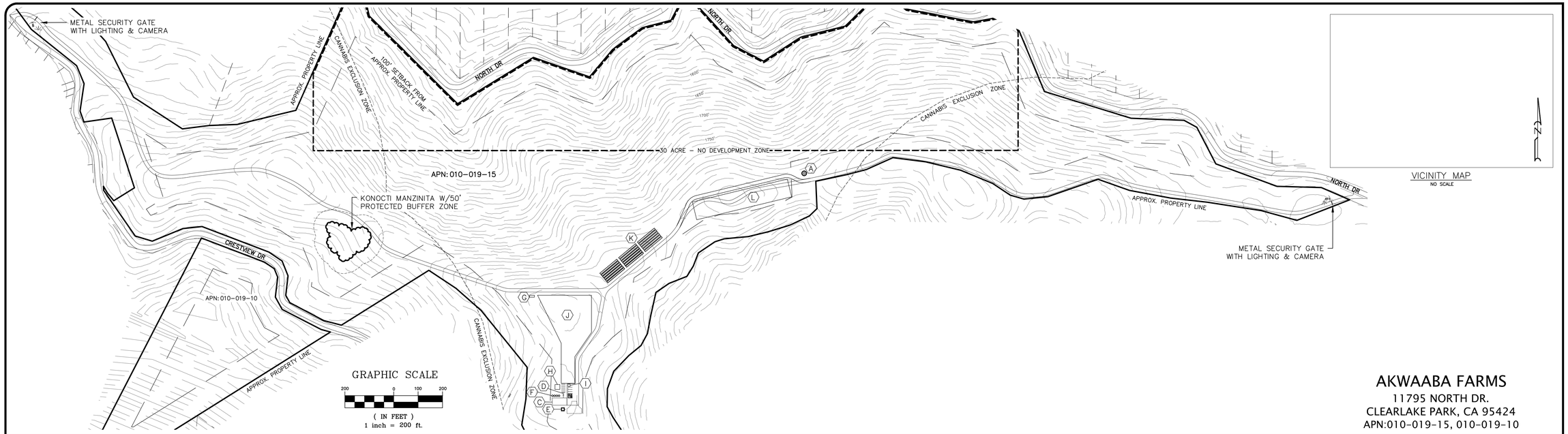
All personnel will be required to undergo a criminal background check with the Lake County Sheriff's Office. Visitors and personnel will be required to sign-in and sign-out each day, and record the areas in which they worked and the tasks they were assigned. Personnel will be required to store personal items (except for food, water, and drinks) in their vehicles throughout their shift.

Akwaaba will adhere to the inventory tracking and recording requirements of the California Cannabis Track-and-Trace (CCTT) system. All personnel will be trained in the requirements of the CCTT system, and all cannabis transfers/movement will be reported through the CCTT system. At least one member of Akwaaba's managerial staff will be a designated track-and-trace system administrator. A track-and-trace system administrator will supervise all tasks with high potential for diversion/theft, and will document which personnel took part in the task(s). In the event of any diversion/theft, law enforcement and the appropriate licensing authority will be notified within 24 hours of discovery.

Community Liaison and Emergency Contact

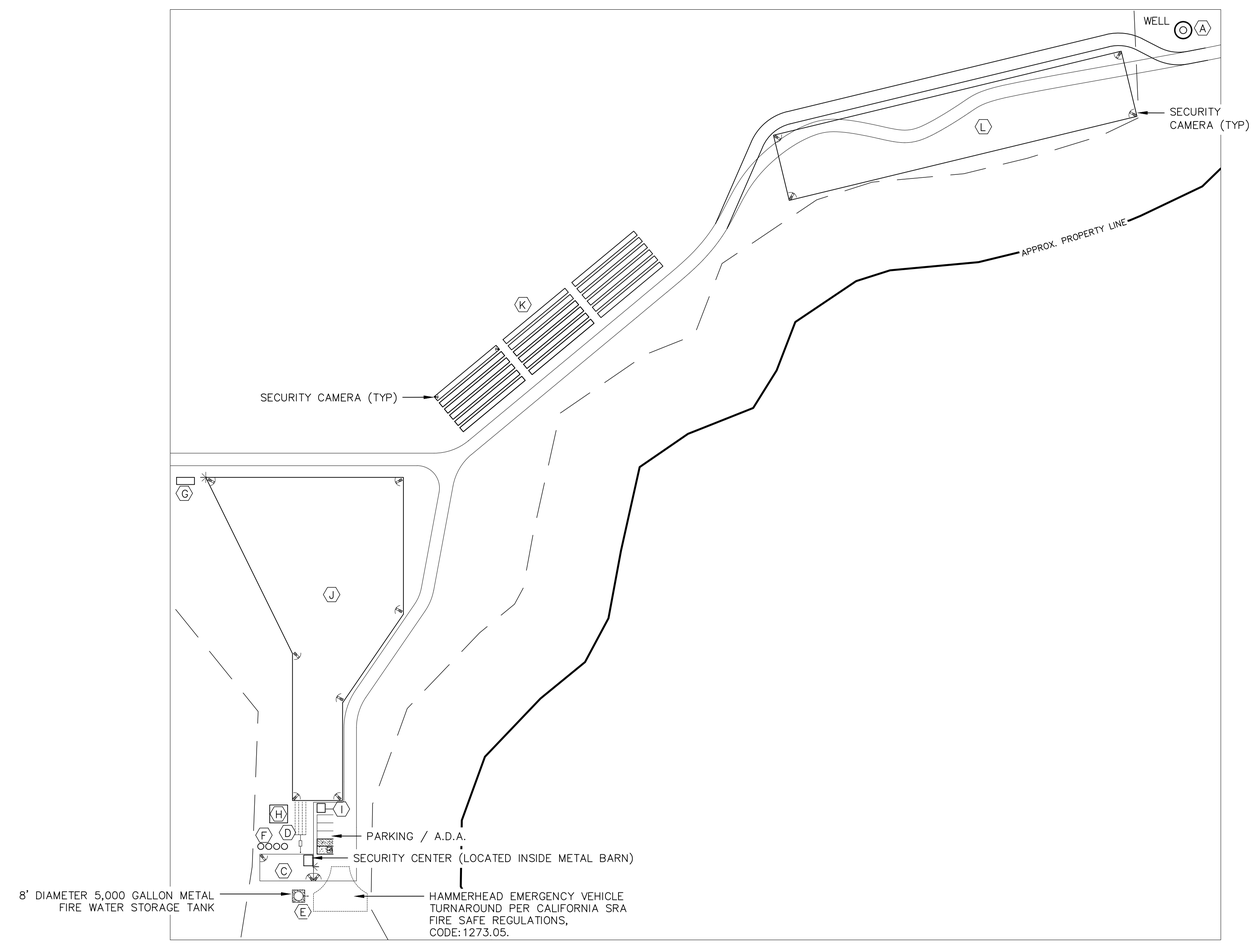
A Community Liaison/Emergency Contact will be made available to Lake County Officials/Staff and the Lake County Sheriff's Office at all times to address any needs or issues that may arise. Akwaaba will provide the name, cell phone number, and email address of the Community Liaison/Emergency Contact to all interested County Departments, Law Enforcement Officials, and neighboring property owners and residents. Akwaaba will encourage neighboring residents to contact the Community Liaison/Emergency Contact to resolve any problems before contacting County Officials. When a complaint is received, the Community Liaison/Emergency Contact will document the complainant and the reason for the complaint, then take action to resolve the issue (see the Odor Response Program in the Air Quality section of this Property Management Plan for odor related complaints/issues). A tally and summary of complaints/issues will be provided in California Paradise's annual Performance Review Report.

The Community Liaison/Emergency Contact for the proposed cultivation operation is Ms. Angie DeCoux. Ms. DeCoux's cell phone number is (707) 601-1525, and her email address is AkwaabaFarms@gmail.com.



AKWAABA FARMS

11795 NORTH DR.
CLEARLAKE PARK, CA 95424
APN:010-019-15, 010-019-10



SECURITY SITE PLAN

GRAPHIC SCALE
80 0 40 80
(IN FEET)
1 inch = 80 ft.

LEGEND:

1530	CONTOUR ELEVATION
	FENCE
	CREEK / SWALE
	(P) SECURITY CAMERA
	(P) SECURITY LIGHTING
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
DWY	DRIVEWAY
(E)	EXISTING
(P)	PROPOSED
RD	ROAD
SF	SQUARE FEET

NOTES:
1. CONTOUR INTERVAL IS 10'

(A) (E) GROUNDWATER WELL
LAT: 38.99555°
LONG: –122.68973°
BENEFICIAL USE: IRRIGATION

(C) (E) 30'x60' (1,800 SF) METAL BARN / DRYING & HARVEST STORAGE FACILITY

(D) (E) 1,250 GAL. SEPTIC TANK / LEACH FIELD

(E) (E) FOUNDATION WITH 8' DIAMETER 5,000 GALLON METAL FIRE WATER STORAGE TANK

(F) (E) FOUR 5,000 GALLON WATER STORAGE TANKS

(G) (E) 8'x20' (160 SF) PESTICIDES & AGRICULTURAL CHEMICALS STORAGE AREA

(H) (E) 20'x20' COMPOST AREA

(I) (E) DESIGNATED REFUSE AREA

(J) (E) 43,560 SF OUTDOOR CULTIVATION / CANOPY AREA

(K) (E) EIGHTEEN 6'X90' (540 SF) MIXED–LIGHT CANOPY AREAS (LOW HOOPS)

(L) (E) 75'X400' (30,000 SF) OUTDOOR CULTIVATION / CANOPY AREA

Revisions:

REALM ENGINEERING
CIVIL ENGINEERING, SURVEYING & PLANNING
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PLANS PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER
JASON B. VINE
No. 67800
exp.06/30/21
CIVIL
STATE OF CALIFORNIA

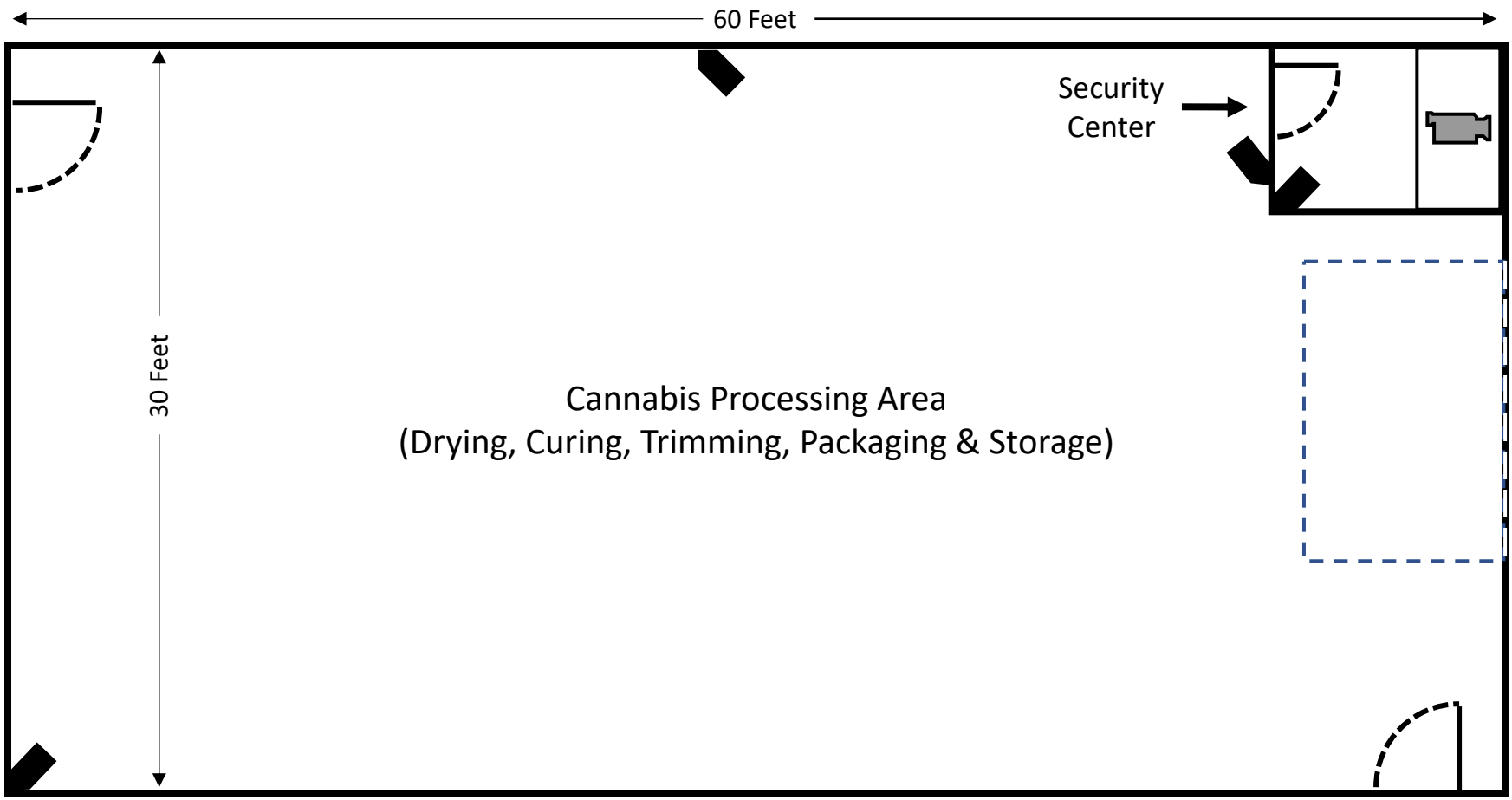
SECURITY SITE PLAN

APNs:010–019–15, 010–019–10 & 010–019–14
11795 NORTH DRIVE
CLEARLAKE, CA 95422
LAKE COUNTY

PLOTTED BY:	--- --- ---
DATE PLOTTED:	3/08/21
SCALE OF DRAWING:	SEE PLAN
JOB NUMBER:	
CADD FILE:	
SHEET:	1

Proposed Processing Facility/Building Layout

(Existing Metal Barn)



Waterproof Surveillance Cameras with 1080p resolution and a 90° field of view. (Arrow indicates direction of view)

Video Surveillance Monitoring and Recording Station

SECTION – H

STORM WATER MANAGEMENT PLAN

Storm Water Management Plan

Purpose and Overview

Akwaaba, LLC (Akwaaba) is seeking a Major Use Permit from the County of Lake, for a proposed commercial cannabis cultivation operation at 11795 North Drive near Clearlake Park, California on Lake County APN 010-019-15 (Project Parcel). Akwaaba's proposed cultivation operation will be composed of three A-Type 2 "Medium Outdoor" cultivation areas and an A-Type 2B "Small Mixed-Light" cultivation area (with a total combined cultivation/canopy area of 83,280 ft^2), a 1,800 ft^2 Drying & Harvest Storage Facility (existing metal barn), and a 160 ft^2 Pesticide & Agricultural Chemicals Storage Area (proposed metal shipping/storage container). The proposed cultivation areas will be enclosed with 6-foot tall galvanized woven wire fences, covered with privacy screen/mesh where necessary to screen the cultivation/canopy areas from public view. The growing medium of the proposed outdoor cultivation/canopy areas will be an imported organic soilless growing medium (composed mostly of composted forest material) in aboveground fabric pots. Akwaaba will use drip and micro-spray irrigation systems to deliver irrigation water to the aboveground fabric pots, and to conserve water resources. All water for the proposed cultivation operation will come from the existing onsite groundwater well located at Latitude: 38.99555° and Longitude: -122.68973°.

The intent/purpose of this Storm Water Management Plan is to protect the water quality of the surface and stormwater management systems managed by Lake County, and to evaluate the impact on downstream property owners. The proposed cultivation operation will increase the impervious surface area of the Project Parcel by approximately 160 ft^2, or less than 0.1% of the Project Parcel, through the installation of an 8' X 20' Pesticide & Agricultural Chemicals Storage Area (metal shipping/storage container). The proposed outdoor cultivation/canopy areas will not increase the impervious surface area of the Project Parcel and should not increase the volume of runoff from the Project Site. The proposed parking lot will have a permeable gravel surface, and the proposed ADA parking space will be constructed of permeable pavers.

Akwaaba will focus on low impact development (LID) and "green" stormwater management infrastructure to achieve permanent stabilization post site development as quickly as possible. LID practices utilizing "green" infrastructure will manage storm water by minimizing impervious surfaces, maintaining, preserving, and enhancing existing vegetation, and by using natural systems to filter and infiltrate stormwater into the ground. LID with "green" storm water infrastructure is cost competitive with traditional storm water management infrastructure/practices, while providing numerous other long-term benefits, such as improved water quality, ecosystem enhancement, and preserved/improved aesthetics. The stormwater management measures outlined in this Storm Water Management Plan meet and/or exceed the requirements of the Lake County Storm Water Management Ordinance (Chapter 29 of the Lake County Ordinance Code).

Receiving Water Bodies and Infrastructure

The Project Parcel is located along the spine of Sulphur Bank Ridge, near the base of a large peninsula that extends out into Clear Lake. The western extent of the large peninsula is known as Sulphur Bank Point. There are no watercourses or other surface water bodies (including wetlands and vernal pools) on the Project Parcel. Stormwater runoff from the Project Parcel flows north, south, and east, into ephemeral drainages that discharge into Clear Lake (north and south) or Borax Lake (east). All areas of the proposed cultivation operation will be located more than 100 feet from any surface waterbody.

The Project Property is accessed via North Drive and Crestview Drive. A private gravel and native soil surfaced access road winds through the Project Parcel, connecting North Drive to Crestview Drive through the Project Parcel. There are no watercourse crossings on the private access road. Stormwater runoff from the Project Parcel, passes under Crestview Drive, North Drive, and Sulphur Bank Drive via County-maintained culverted watercourse crossings. Development of the proposed cultivation operation, with the implementation of the LID practices and erosion and sediment control measures outlined below, will not increase the volume of stormwater discharges from the Project Property onto adjacent properties or flood elevations downstream.

Ground Disturbance and Grading

Soils of the Project Parcel in the area of the proposed cultivation operation are identified as the Maymen-Millsholm-Bressa complex by the NRCS Web Soil Survey (attached), and characterized as well-drained gravelly and clay loams derived from residuum weathered from sedimentary rock. The proposed cultivation operation will increase the impervious surface area of the Project Parcel by approximately 160 ft^2, or less than 0.1% of the Project Parcel, through the installation of an 8' X 20' Pesticide & Agricultural Chemicals Storage Area (proposed metal shipping/storage containers). The proposed outdoor cultivation/canopy areas will not increase the impervious surface area of the Project Property and should not increase the volume of runoff from the Project Site. The proposed parking lot will have a permeable gravel surface, and the proposed ADA parking space will be constructed of permeable pavers.

Development of the proposed cultivation operation would occur in two phases. The first phase of project/site development would occur immediately after issuance of a Major Use Permit for the proposed cultivation operation. The second phase of project/site development would occur approximately one year after the issuance of the Major Use Permit. No trees will be removed from the Project Parcel as a result of site/project development, and no grading would be necessary to establish the proposed cultivation operation. Additionally, four Konocti manzanita have been identified on the Project Parcel. No disturbance/development is proposed within 100 feet of the Konocti Manzanita, and a 50-foot buffer will be marked and maintained around the Konocti Manzanita.

Erosion and Sediment Control Measures

Established vegetation within and around the proposed cultivation operation will be maintained/protected to the extent possible, as a permanent erosion and sediment control measure. All structures and cultivation areas will be located more than 100 feet from the nearest surface water bodies, and stormwater runoff from the structures and cultivation areas will be discharged to the well-vegetated buffers surrounding the proposed cultivation operation to filter and/or remove any sediment, nutrients, and/or pesticides mobilized by stormwater runoff, and prevent those pollutants from reaching nearby surface water bodies.

A native grass seed mixture and certified weed-free straw mulch will be applied at a rate of two tons per acre to all areas of the exposed soil prior to November 15th of each year, until permanent stabilization has been achieved. Straw wattles and silt fences will be installed and maintained throughout the proposed cultivation operation per the attached Erosion & Sediment Control Site Plan following site development, until permanent stabilization has been achieved. If areas of concentrated stormwater runoff begin to develop, additional erosion and sediment control measures will be implemented to protect those areas and their outfalls. Akwaaba's managerial staff will conduct monthly monitoring inspections to confirm that this operation is in compliance with California Water Code/SWRCB's Cannabis General Order.

Regulatory Compliance (Stormwater)

The Project Parcel was enrolled for coverage under the State Water Resources Control Board's Cannabis General Order (Order No. WQ-2019-0001-DWQ), as a Tier 2 Low Risk Discharger in October of 2020. Site Management and Nitrogen Management Plans will be developed for the proposed cultivation operation, and submitted to the Central Valley Regional Water Quality Control Board (CVRWQCB) for review, prior to planting. Each year, prior to March 1st, an Annual Monitoring Report will be prepared and submitted to the CVRWQCB, demonstrating measures taken over the course of the previous year to comply with the Cannabis General Order.

The stormwater management measures outlined above meet or exceed the requirements of the Lake County Storm Water Management Ordinance (Chapter 29 of the Lake County Ordinance Code). Development of the proposed cultivation operation, with the implementation of the LID practices and erosion and sediment control measures outlined above, will not increase the volume of stormwater discharges from the Project Property onto adjacent properties or flood elevations downstream.

Storm Water Management Monitoring and Reporting

The following are the Monitoring and Reporting Requirements for the proposed cannabis cultivation operation from the Cannabis General Order:

- Winterization Measures Implementation
- Tier Status Confirmation
- Third Party Identification (if applicable)
- Nitrogen Application (Monthly and Total Annual)

An Annual Report shall be submitted to the State Water Quality Control Board by March 1st of each year. The Annual Report shall include the following:

1. Facility Status, Site Maintenance Status, and Storm Water Runoff Monitoring.
2. The name and contact information of the person responsible for operation, maintenance, and monitoring.

A letter transmitting the annual report shall accompany each report. The letter shall summarize the numbers and severity of violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Akwaaba will adhere to these monitoring requirements to maintain compliance with the Cannabis General Order, and will be happy to provide a copy of his Annual Monitoring Report to Lake County Officials if requested.

Cannabis Vegetative Material Waste Management

Cannabis Waste

"Cannabis waste" is an organic waste, as defined in Section 42649.8(c) of the Public Resources Code. Cannabis waste generated from the proposed cannabis cultivation operation will be limited to cannabis plant leaves and stems. All other parts of cannabis plants cultivated at this site will be transferred to a State of California-licensed Distributor for distribution to State of California-licensed Processors and Manufacturers. The proposed cannabis cultivation operation should generate approximately 300 pounds of dried cannabis waste each cultivation season (April 15th through November 15th). All cannabis waste will be composted onsite.

Cannabis Waste Composting

All cannabis waste generated from the proposed cultivation operation will be composted on-site and in compliance with Title 14 of the California Code of Regulations at Division 7, Chapter 3.1. Cannabis waste will be ripped/shredded and placed in the designated composting areas. In the designated composting areas, cannabis waste will be composted until it is incorporated into the soils of the proposed outdoor cultivation/canopy areas as a soil amendment.

Cannabis Waste Records/Documentation

Cannabis waste generated from the proposed cannabis cultivation operation will be identified, weighed, and tracked while onsite. All required information pertaining to cannabis waste will be entered into the State of California Cannabis Track-and-Trace (CCTT) system. Akwaaba will maintain accurate and comprehensive records regarding cannabis waste generation that will account for, reconcile, and evidence all activity related to the generation or disposition of cannabis waste. All records will be kept on-site for seven (7) years and will be made available during inspections.

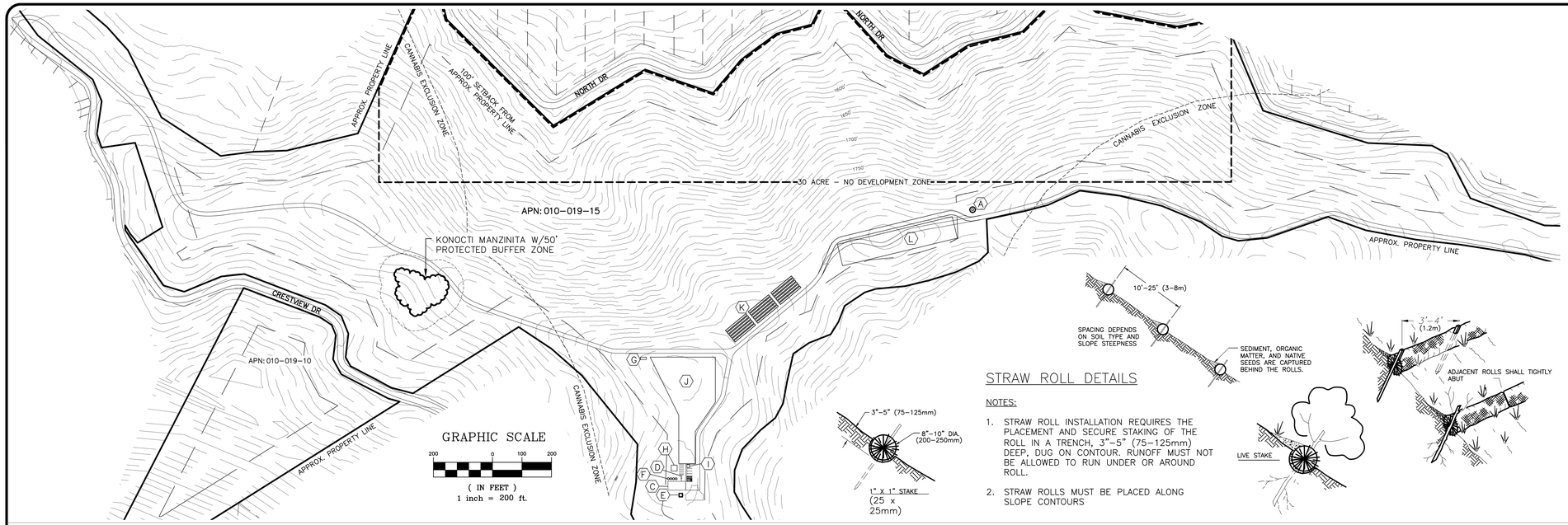
Growing Medium Management

Growing Medium Overview

The growing medium of the proposed outdoor cannabis cultivation/canopy area will composed of an above grade organic soilless growing medium (composed mostly of composted forest material), in aboveground planters (plastic and cloth garden pots). The organic soilless growing medium of each garden pot will be amended with compost, composted manure, worm castings, and vermiculite (only when needed to achieve the desired soil density), and reused annually. Akwaaba will only use low salt fertilizers, so that salts do not accumulate within the organic soilless growing medium of the proposed cultivation areas, rendering it unusable.

Growing Medium Waste

Ideally, the growing medium of the cultivation areas will be amended and reused each year/cultivation season. In the event of a root and/or soil borne pest infestation, the infested soil will be removed from the cultivation area(s), quarantined, treated with a pesticide that targets the infestation and that is approved for use in cannabis cultivation by the California Department of Food and Agriculture, then incorporated with compost in the designated composting area. After composting, the treated soil will be reintroduced to the proposed outdoor cultivation area as a soil amendment. No growing medium waste should be generated from the proposed cannabis cultivation operation (all growing medium should be recycled/reused).



EROSION & SEDIMENT CONTROL NOTES:

1. CONTRACTOR IS TO IMPLEMENT BEST MANAGEMENT PRACTICES (BMPS) TO CONTROL EROSION CONTROL AND REDUCE THE OFF-SITE DISCHARGE OF SEDIMENT TO THE MAXIMUM EXTENT PRACTICABLE.
2. EROSION CONTROL BMPS SHALL BE IN PLACE AND MAINTAINED ALL YEAR ROUND.
3. HE CONTRACTOR SHALL FOLLOW THE GUIDELINES FROM THE "CALIFORNIA STORMWATER BMP HANDBOOK" FOR THE MEASURES SHOWN OR STATED ON THESE PLANS.
4. CONTRACTOR MUST ENSURE THAT THE CONSTRUCTION SITE IS PREPARED PRIOR TO THE ONSET OF ANY STORM.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE QUALIFIED SWPPP PRACTITIONER (QSP).
6. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO ANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF OR AT THE DIRECTION OF A REPRESENTATIVE OF LAKE COUNTY.
7. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED BEFORE AND AFTER ALL STORMS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
8. CONTRACTOR SHALL MAINTAIN A LOG AT THE SITE OF ALL INSPECTIONS OR MAINTENANCE OF BMPS, AS WELL AS, ANY CORRECTIVE CHANGES TO THE BMPS OR EROSION AND SEDIMENT CONTROL PLAN.
9. THE CONTRACTOR SHALL INSTALL THE STABILIZED CONSTRUCTION ENTRANCE PRIOR TO COMMENCEMENT OF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCE.
10. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE SWEPT AT THE END OF EACH WORKING DAY OR AS NECESSARY.
11. ANY LOOSE GROUND FROM EXCAVATING GRADING OPERATIONS SHALL BE SECURED PRIOR TO ANY RAIN EVENT. STRAW OR TARP ALL DISTURBED OR EXCAVATED GROUND.
12. CONTRACTOR SHALL PLACE GRAVEL BAGS AROUND ALL NEW DRAINAGE STRUCTURE OPENINGS IMMEDIATELY AFTER THE STRUCTURE OPENING IS CONSTRUCTED. THESE GRAVEL BAGS SHALL BE MAINTAINED AND REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED.
13. AS A MINIMUM, ALL GRADED AREAS AND EXPOSED SOIL WITHIN THE PROJECT SHALL BE SEEDED PER THE REQUIREMENTS OF LAKE COUNTY.
14. DUST GENERATION MUST BE MINIMIZED AND A WATER TRUCK MUST BE AVAILABLE ON-SITE FOR ADEQUATE DUST CONTROL.

STRAW ROLL DETAILS

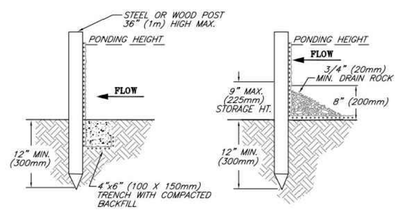
NOTES:

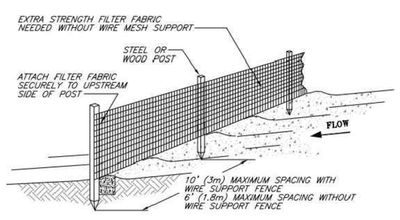
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"–5" (75–125mm) DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
2. STRAW ROLLS MUST BE PLACED ALONG SLOPE CONTOURS

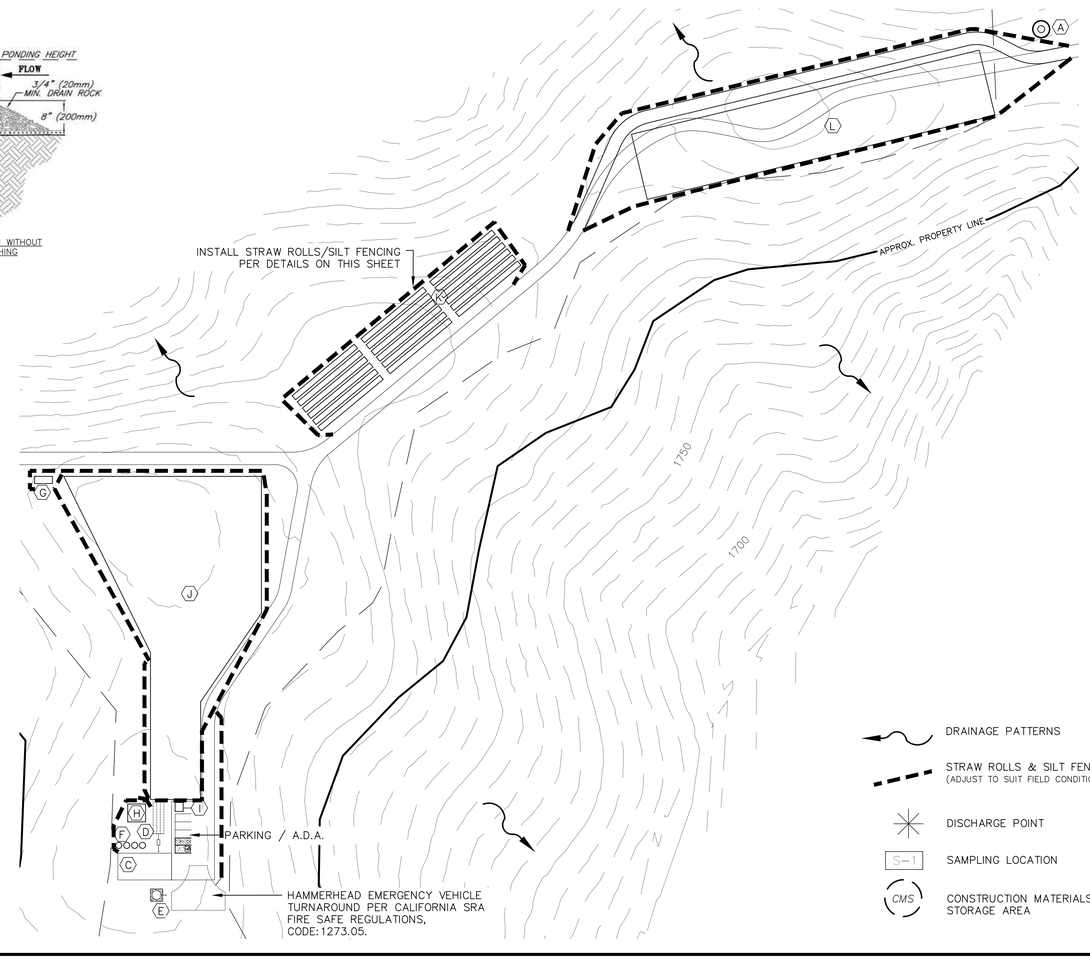
SILT FENCE DETAILS

NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT & REPAIR FENCE AFTER EACH STORM EVENT & REMOVE SEDIMENT WHEN NECESSARY.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.







AKWAABA FARMS

11795 NORTH DR.
CLEARLAKE PARK, CA 95424
APN:010-019-15, 010-019-10

LEGEND:

1530	CONTOUR ELEVATION
	FENCE
	CREEK / SWALE
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
DWY	DRIVEWAY
(E)	EXISTING
(P)	PROPOSED
RD	ROAD
SF	SQUARE FEET

NOTES:
1. CONTOUR INTERVAL IS 10'

(A) (E) GROUNDWATER WELL
LAT: 38.99555°
LONG: –122.68973°
BENEFICIAL USE: IRRIGATION

(C) (E) 30'x60' (1,800 SF) METAL BARN / DRYING & HARVEST STORAGE FACILITY

(D) (E) 1,250 GAL. SEPTIC TANK / LEACH FIELD

(E) (E) FOUNDATION WITH 8' DIAMETER 5,000 GALLON METAL FIRE WATER STORAGE TANK

(F) (E) FOUR 5,000 GALLON WATER STORAGE TANKS

(G) (E) 8'x20' (160 SF) PESTICIDES & AGRICULTURAL CHEMICALS STORAGE AREA

(H) (E) 20'x20' COMPOST AREA

(I) (E) DESIGNATED REFUSE AREA

(J) (E) 43,560 SF OUTDOOR CULTIVATION / CANOPY AREA

(K) (E) EIGHTEEN 6'X90' (540 SF) MIXED-LIGHT CANOPY AREAS (LOW HOOPS)

(L) (E) 75'X400' (30,000 SF) OUTDOOR CULTIVATION / CANOPY AREA

DRAINAGE PATTERNS

STRAW ROLLS & SILT FENCES (ADJUST TO SUIT FIELD CONDITIONS)

DISCHARGE POINT

S-1 SAMPLING LOCATION

CMS CONSTRUCTION MATERIALS STORAGE AREA

EROSION & SEDIMENT CONTROL PLAN

GRAPHIC SCALE
80 0 40 80
(IN FEET)
1 inch = 80 ft.

Revisions:

REALM ENGINEERING
CIVIL ENGINEERING, SURVEYING & PLANNING
1767 MARKET STREET SUITE c
REDDING, CA. 96001
530-526-7493

PLANS PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER
JASON B. VINE
No. 67800
exp.06/30/21
CIVIL
STATE OF CALIFORNIA

EROSION & SEDIMENT CONTROL PLAN

APNs:010–019–15, 010–019–10 & 010–019–14
11795 NORTH DRIVE
CLEARLAKE, CA 95422
LAKE COUNTY

PLOTTED BY:	---
DATE PLOTTED:	6/01/21
SCALE OF DRAWING:	SEE PLAN
JOB NUMBER:	
CADD FILE:	
SHEET:	1

30 October 2020 WDID: 5S17CC428962

DISCHARGER/LANDOWNER
Angie DeCoux
Akwaaba, LLC
P.O. Box 777
Clearlake Park, CA 95423

NOTICE OF APPLICABILITY, WATER QUALITY ORDER WQ-2019-0001-DWQ, ANGIE DECOUX, APN 010-019-150-000, LAKE COUNTY

Angie DeCoux (hereafter "Discharger and Landowner") submitted information through the State Water Resources Control Board's (State Water Board's) online portal on 29 August 2020, for discharges of waste associated with cannabis cultivation related activities. Based on the information provided, the Discharger self-certifies the cannabis cultivation activities are consistent with the requirements of the State Water Board *Cannabis Cultivation Policy- Principles and Guidelines for Cannabis Cultivation* (Policy), and the *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities*, Order No. WQ-2019-0001-DWQ (General Order). This letter provides notice that the Policy and General Order are applicable to the site as described below. You are hereby assigned waste discharge identification (WDID) number **5S17CC428962**.

The Discharger is responsible for all applicable requirements in the Policy, General Order, and this Notice of Applicability (NOA), including submittal of all required reports. The Discharger is the sole person with legal authority to, among other things, change information submitted to obtain regulatory coverage under the General Order; request changes to enrollment status, including risk designation; and terminate regulatory coverage. The Central Valley Regional Water Quality Control Board (Central Valley Water Board) will hold the Discharger liable for any noncompliance with the Policy, General Order, and this NOA, including non-payment of annual fees.

1. FACILITY AND DISCHARGE DESCRIPTION

The information submitted by the Discharger states the disturbed area is equal to or greater than 1 acre (43,560 square feet), no portion of the disturbed area is within the setback requirements, no portion of the disturbed area is located on a slope greater than 30 percent, and the cannabis cultivation area is less than or equal to 1 acre.

Based on the information submitted by the Discharger, the cannabis cultivation activities are classified as Tier 2, low risk.

2. SITE-SPECIFIC REQUIREMENTS

The Policy and General Order are available on the Internet at (http://www.waterboards.ca.gov/water_issues/programs/cannabis/). The Discharger shall ensure that all site operating personnel know, understand, and comply with the requirements contained in the Policy, General Order, this NOA, and the Monitoring and Reporting Program (MRP, Attachment B of the General Order). Note that the General Order contains standard provisions, general requirements, and prohibitions that apply to all cannabis cultivation activities.

The application requires the Discharger to self-certify that all applicable Best Practicable Treatment or Control (BPTC) measures are being implemented, or will be implemented by the onset of the winter period (November 15 - April 1), following the enrollment date.

3. TECHNICAL REPORT REQUIREMENTS

The following technical report(s) shall be submitted by the Discharger as described below:

1. A *Site Management Plan* must be submitted within 90 days of applying for enrollment in the General Order; this deadline falls on **27 November 2021**. For more information on the requirements to submit a *Site Management Plan*, see General Order Provision C.1.a, and Attachment A, Section 5. Attachment D of the General Order provides guidance on the contents of a *Site Management Plan***.** For more information on the requirements to submit a *Site Management Plan*, see General Order Provision C.1.a, and Attachment A, Section 5. Attachment D of the General Order provides guidance on the contents of a *Site Management Plan*. Dischargers that cannot implement all applicable BPTC measures by the onset of the winter period, following their enrollment date, shall submit to the appropriate Central Valley Water Board a *Site Management Plan* that includes a time schedule and scope of work for use by the Central Valley Water Board in developing a compliance schedule as described in Attachment A of the General Order. You are not required to use a Qualified Professional for developing the *Site Management Plan.* However, you are required to submit the *Site Management Plan* to Central Valley Water Board staff for approval prior to any site development.
2. *A Site Closure Report* must be submitted 90 days prior to permanently ending cannabis cultivation activities and seeking to rescind coverage under the Conditional Waiver. The *Site Closure Report* must be consistent with the requirements of General Order Provision C.1.e., and Attachment A, Section 5. Attachment D of the General Order provides guidance on the contents of the *Site Closure Report.*

4. MONITORING AND REPORTING PROGRAM

The Discharger shall comply with the Monitoring and Reporting Program (MRP). Attachment B of the General Order provides guidance on the contents for the annual reporting requirement. Annual reports shall be submitted to the Central Valley Water Board by March 1 following the year being monitored. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Central Valley Water Board's Executive Officer or the State Water Board's Chief Deputy Director, or Deputy Director.

5. ANNUAL FEE

According to the information submitted, the discharge is classified as Tier 2, low risk with the current annual fee assessed at $1000. The fee is due and payable on an annual basis until coverage under this General Order is formally rescinded. To rescind coverage, the Discharger must submit a Notice of Termination, including a *Site Closure Report* at least 90 days prior to termination of activities and include a final MRP report.

6. TERMINATION OF COVERAGE UNDER THE GENERAL ORDER & REGIONAL WATER BOARD CONTACT INFORMATION

Cannabis cultivators that propose to terminate coverage under the Conditional Waiver or General Order must submit a Notice of Termination (NOT). The NOT must include a *Site Closure Report* (see Technical Report Requirements above), and Dischargers enrolled under the General Order must also submit a final monitoring report. The Central Valley Water Board reserves the right to inspect the site before approving a NOT. Attachment C includes the NOT form and Attachment D of the General Order provides guidance on the contents of the *Site Closure Report.*

If the Discharger cannot comply with the General Order, or will be unable to implement an applicable BPTC measure contained in Attachment A by the onset of the winter period each year, the Discharger shall notify Central Valley Water Board staff by telephone at 530-224-4845 so that a site-specific compliance schedule can be developed.

All monitoring reports, submittals, discharge notifications, and questions regarding compliance and enforcement should be directed to centralvalleyredding@waterboards.ca.gov or 530-224-4845.

(for) Patrick Pulupa,
Executive Officer

JF: mb

cc via email: Kevin Porzio, State Water Resources Control Board, Sacramento
Mark Roberts, Lake County Planning Department, Lakeport

SECTION – I

WATER USE MANAGEMENT PLAN

Water Use Management Plan

Purpose and Overview

Akwaaba, LLC (Akwaaba) is seeking a Major Use Permit from the County of Lake, for a proposed commercial cannabis cultivation operation at 11795 North Drive near Clearlake Park, California on Lake County APN 010-019-15 (Project Parcel). Akwaaba's proposed cultivation operation will be composed of three A-Type 2 "Medium Outdoor" cultivation areas and an A-Type 2B "Small Mixed-Light" cultivation area (with a total combined cultivation/canopy area of 83,280 ft^2), a 1,800 ft^2 Drying & Harvest Storage Facility (existing metal barn), and a 160 ft^2 Pesticide & Agricultural Chemicals Storage Area (proposed metal shipping/storage container). The proposed cultivation areas will be enclosed with 6-foot tall galvanized woven wire fences, covered with privacy screen/mesh where necessary to screen the cultivation/canopy areas from public view. The growing medium of the proposed outdoor cultivation/canopy areas will be an imported organic soilless growing medium (composed mostly of composted forest material) in aboveground fabric pots. Akwaaba will use drip and micro-spray irrigation systems to deliver irrigation water to the aboveground fabric pots, and to conserve water resources. All water for the proposed cultivation operation will come from the existing onsite groundwater well located at Latitude: 38.99555° and Longitude: -122.68973°.

This Water Use Management Plan (WUMP) is designed to conserve Lake County's water resources and to ensure that the proposed cultivation operation's water use practices are in compliance with applicable County, State, and Federal regulations at all times. This WUMP focuses on designing a water efficient delivery system and irrigation practices, and the appropriate and accurate monitoring and reporting of water use practices. Also included in this WUMP is a description of the Water Resources of the Project Property, and a Water Availability Analysis.

Description of Water Resources

Surface Water

The Project Parcel is located along the spine of Sulphur Bank Ridge, near the base of a large peninsula that extends out into Clear Lake. The western extent of the large peninsula is known as Sulphur Bank Point. There are no watercourses or other surface water bodies (including wetlands and vernal pools) on the Project Parcel. Stormwater runoff from the Project Parcel flows north, south, and east, into ephemeral drainages that discharge into Clear Lake (north and south) or Borax Lake (east). All areas of the proposed cultivation operation will be located more than 100 feet from any surface waterbody.

Groundwater

Soils of the Project Parcel in the area of the proposed cultivation operation are identified as the Maymen-Millsholm-Bressa complex by the NRCS Web Soil Survey (attached), and characterized

as well-drained gravelly and clay loams derived from residuum weathered from sedimentary rock. The United States Geological Survey Map of the Santa Rosa Quadrangle defines the area in the vicinity of the Project Property as the Franciscan Complex, composed mostly of sandstone, shale, conglomerate, chert, greenstone, and metagraywacke. The Project Property is not located within any of the 13 groundwater basins/source areas identified in the 2006 Lake County Groundwater Management Plan. All water for the proposed cultivation operation will come from the existing onsite groundwater well located at Latitude: 38.99555° and Longitude: -122.68973°. This groundwater well was drilled in November of 2020, through shale, chert, and sand stone, to a depth of 660 feet below ground surface. This well had an estimated yield of 80 gallons per minute at the time it was drilled.

Water Resources Protection

Akwaaba will maintain existing, naturally occurring, riparian vegetative cover (e.g., trees, shrubs, and grasses) in aquatic habitat areas to the maximum extent possible to maintain riparian areas for streambank stabilization, erosion control, stream shading and temperature control, sediment and chemical filtration, aquatic life support, wildlife support, and to minimize waste discharges. Access roads and parking areas are/will be graveled to prevent the generation of fugitive dust, and vegetative ground cover will be preserved and/or re-established as soon as possible throughout the entire site to filter and infiltrate stormwater runoff from the access roads, parking areas, and the proposed cultivation operation. Personnel will have access to the restroom/washroom facilities of the proposed Drying & Harvest Storage Facility at all times when onsite.

The Project Parcel was enrolled for coverage under the State Water Resources Control Board's Cannabis General Order (Order No. WQ-2019-0001-DWQ), as a Tier 2 Low Risk Discharger in October of 2020. Site Management and Nitrogen Management Plans will be developed for the proposed cultivation operation, and submitted to the Central Valley Regional Water Quality Control Board (CVRWQCB) for review, prior to planting. Each year, prior to March 1st, an Annual Monitoring Report will be prepared and submitted to the CVRWQCB, demonstrating measures taken over the course of the previous year to comply with the Cannabis General Order. California Paradise will maintain compliance with the Cannabis General Order for the protection of water resources for as long as the proposed cultivation operation is operating.

Water Sources and Storage

All water for the proposed cultivation operation will come from the existing onsite groundwater well located at Latitude: 38.99555° and Longitude: -122.68973°. In late 2020, when this well was drilled, it had an estimated yield of 80 gallons per minute. On May 29th, 2021 an NSF/ANSI 61 compliant positive displacement mechanical brass totalizing meter and a Well Watch 670 sonic water level meter equipped with data logging capabilities, were installed on the groundwater well. Immediately following installation of this equipment, an 8-hour pump test was performed to thoroughly evaluate the production capacity of the well using a small electrical pump that had previously been installed in the well. The small electrical pump could only produce 12 gallons per minute at a depth of 600 feet below ground surface. During the pump test, the water level in the

well only dropped four feet and remained static for the duration of the 8-hour pump test (please see the attached report from Will Peterson Well Drilling). Within 30 minutes after pumping of the well ceased, the water level in the well rebounded to 600 feet below ground surface (100% recovery). The results and conclusions of this test indicate that the existing onsite groundwater well is capable of producing at least 12 gallons per minute.

Akwaaba will install at least four 5,000-gallon heavy-duty plastic water storage tanks on the Project Parcel to provide additional stored water for irrigation purposes/uses. Akwaaba may develop additional water storage on the Project Parcel should it be needed to support the irrigation and fire protection needs of the proposed cultivation operation.

Irrigation

From the CalCannabis Cultivation Licensing Program's Final Programmatic Environmental Impact Report (PEIR):

"According to Hammon et al. (2015), water use requirements for outdoor cannabis production (25-35 inches per year) are generally in line with water use for other agricultural crops, such as corn (20-25 inches per year), alfalfa (30-40 inches per year), tomatoes (15-25 inches per year), peaches (30-40 inches per year), and hops (20-30 inches per year). In a study of cannabis cultivation in Humboldt County, approximate water use for an outdoor cultivation site was 27,470 gallons (0.08 acre-feet) per year on average and ranged from approximately 1,220 to 462,000 gallons per year (0.004 to 1.4 acre-feet), with the size of the operation being a major factor in this range. Annual water uses for a greenhouse operation averaged approximately 52,300 gallons (0.16 acre-feet) and ranged from approximately 610 to 586,000 gallons (0.002 to 1.8 acre-feet) annually (Butsic and Brenner 2016). During a field visit conducted by technical staff to an outdoor cultivation site, one cultivator reported using approximately 75,000 gallons (0.23 acre-feet) for 1 year's entire cannabis crop (approximately 66 plants), or approximately 1,140 gallons per plant per year."

Akwaaba's proposed cultivation practices are similar to commercial tomato or hops production, with an estimated water use requirement of 25 inches per year. Akwaaba's proposed cannabis cultivation/canopy area is 83,280 ft^2 with an expected total annual water use requirement of 1,296,900 gallons (a little less than 4 acre-feet). The cultivation season for the proposed cultivation operation will begin in April and end in November of each year. The following table presents the expected water use of the proposed cultivation operation by month during the cultivation season in gallons and acre-feet.

April	May	June	July	August	September	October	November
32,585	65,170	162,925	260,680	293,270	260,680	195,510	32,585
0.1	0.2	0.5	0.8	0.9	0.8	0.6	0.1

Akwaaba will install at least four 5,000-gallon heavy-duty plastic water storage tanks on the Project Property to provide additional stored water for irrigation purposes/uses. Akwaaba may develop additional water storage on the Project Parcel should it be needed to support the irrigation and fire protection needs of the proposed cultivation operation. The water storage tanks will be

equipped with float valves to shut off the flow water from the well and prevent the overflow and runoff of irrigation water when full. Water will be pumped from the water storage tanks to the irrigation systems of the proposed cultivation/canopy areas via HDPE water supply lines. The water supply lines will be equipped with safety valves, capable of shutting off the flow of water so that waste of water and runoff is prevented/minimized when leaks occur and the system needs repair, and inline water meters compliant with California Code of Regulations, Title 23, Division 3, Chapter 2.7. Akwaaba will maintain daily water meter readings records for a minimum of five years, and will make those records available to Water Boards, CDFW, and Lake County staff upon request. The irrigation systems of the proposed cultivation/canopy area will be composed of PVC piping, black poly tubing, and drip tapes/lines.

Water Availability Analysis

All water for the proposed cultivation operation will come from the existing onsite groundwater well located at Latitude: 38.99555° and Longitude: -122.68973°. In late 2020, when this well was drilled, it had an estimated yield of 80 gallons per minute. On May 29th, 2021 an NSF/ANSI 61 compliant positive displacement mechanical brass totalizing meter and a Well Watch 670 sonic water level meter equipped with data logging capabilities, were installed on the groundwater well. Immediately following installation of this equipment, an 8-hour pump test was performed to thoroughly evaluate the production capacity of the well using a small electrical pump that had previously been installed in the well. The small electrical pump could only produce 12 gallons per minute at a depth of 600 feet below ground surface. During the pump test, the water level in the well only dropped four feet and remained static for the duration of the 8-hour pump test (please see the attached report from Will Peterson Well Drilling). Within 30 minutes after pumping of the well ceased, the water level in the well rebounded to 600 feet below ground surface (100% recovery). The results and conclusions of this test indicate that the existing onsite groundwater well is capable of producing at least 12 gallons per minute. The peak anticipated daily demand for water of the proposed cultivation operation is ~9,776 gallons per day, which equates to a need for the water supply well to produce at least 6.8 gallons per minute over a 24 hour period. There is little doubt that the water supply groundwater well will be able to produce at least 6.8 gallons per minute on the hottest driest days in the latest part of the summer when irrigation water is needed most. Additionally, Akwaaba will develop at least 20,000 gallons of water storage capacity on the property, and there is an additional existing onsite secondary/backup groundwater well on the property, should it be needed to supplement Akwaaba's available water resources.

Water Conservation

Per the Water Conservation and Use requirements outlined in the SWRCB's Cannabis General Order, the following Best Practical Treatment and Control (BPTC) measures will be implemented to conserve water resources:

- Regularly inspect the entire water delivery system for leaks and immediately repair any leaky faucets, pipes, connectors, or other leaks.
- Apply weed-free mulch in cultivation areas that do not have ground cover to conserve soil moisture and minimize evaporative loss.
- Implement water conserving irrigation methods (drip or trickle and micro-spray irrigation).
- Maintain daily records of all water used for irrigation of cannabis. Daily records will be calculated by using a measuring device (inline water meter) installed on the main irrigation supply line between the water storage area and cultivation areas.
- Install float valves on all water storage tanks to keep them from overflowing onto the ground.

Monitoring and Reporting

NSF/ANSI 61 compliant positive displacement mechanical brass totalizing meter and a Well Watch 670 sonic water level meter equipped with data logging capabilities, have been installed on the existing water supply groundwater well. Inline water meters compliant with California Code of Regulations, Title 23, Division 3, Chapter 2.7 have also been installed on the main water supply line running between the existing onsite groundwater well and the storage tanks of the proposed cultivation operation. Akwaaba's staff will record daily water meter and water level readings, and will maintain those records onsite for a minimum of five years. Akwaaba will make those records available to Water Boards, CDFW, and Lake County staff upon request.

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. XXXXXXX

Page 1 of 1

Owner's Well Number: 1

Date Work Began 11-19-20 Date Work Ended 11-24-20

Local Permit Agency LAKE County Environmental Health

Permit Number WE5481 Permit Date 11-18-20

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N Latitude W Longitude

APN/TRS/Other

Geologic Log

Orientation ● Vertical ○ Horizontal ○ Angle Specify

Drilling Method Air Rotary Drilling Fluid

Depth from Surface Feet	to Feet	Description: Describe material, grain size, color, etc
0	200	Brown Shale
200	250	Red/Green Chert
250	420	Brown/Black Shale with Sandstone Stringers
420	480	Chert
480	520	Greenstone/Black Shale
520	660	Sandstone

Total Depth of Boring 665 Feet

Total Depth of Completed Well 660 Feet

Well Owner

Name Quincy Jackson

Mailing Address P.O. Box 777

City Clearlake Park State CA Zip 95424

Well Location

Address 11795 North Drive

City Clearlake Park County LAKE

Latitude ___ Deg. ___ Min. ___ Sec. N Longitude ___ Deg. ___ Min. ___ Sec. W

Datum ___ Dec. Lat. ___ Dec. Long. ___

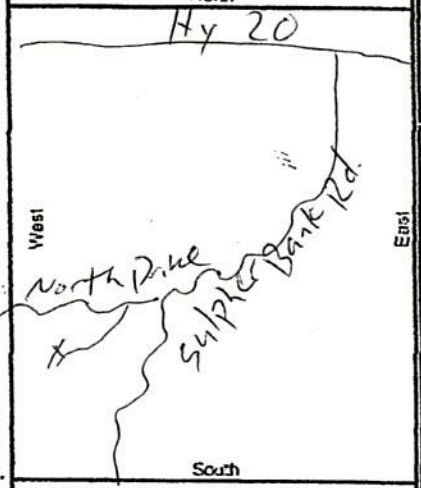
APN Book 010 Page 019 Parcel 15

Township ___ Range ___ Section ___

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

● New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

● Water Supply
☒ Domestic ☐ Public
☒ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 580' (Feet below surface)

Depth to Static Water Level ___ (Feet) Date Measured 11-23-20

Estimated Yield* 80 (GPM) Test Type Air Lift.

Test Length 2 HRS (Hours) Total Drawdown ___ (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	40	9"	F480	PVC	1/4"	5"	Blank	—
40	580	7 1/4"	F480	PVC	1/4"	5"	Blank	—
580	660	7 1/4	F480	PVC	1/4"	5"	Perf.	.032"

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	1	Concrete	SEAL
1	22	Bentonite	
22	660	5/16 Pea	Gravel Pack

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Will Peterson Well Drilling
Person, Firm or Corporation

P.O. BOX 695 Kelseyville CA 95451
Address City State Zip

Signed [signature] 11-24-20 100905
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

WILL PETERSON WELL DRILLING

Quincy Jackson
11795 North Drive
Clearlake Park. CA 95424

6/1/2021

To whom this may concern,

The static water level was 600’ below surface before test began. The static level dropped to 604’ for a drawn down of 4’ after 30 minutes @ 12 GPM.

We pumped 12 GPM for 8 hours. During the test the static never went past 604’ below the surface. Once the pump was stopped the well recharged the static to 600’ below surface in 5 minutes.

The static was rechecked 24 hours from the end of the test and static level was at 600’ below surface.

Feel free to call us with any questions at (707) 277-0103 or (707) 272-1121.

Sincerely,

Will Peterson Well Drilling
Lic#1009053

PO Box 695
Kelseyville, CA 95451

PHONE (707) 277-0103
FAX (707) 277-0103
EMAIL William.peterson707@yahoo.com
WEBSITE www.willpetersonwelldrilling.com

SECTION – J

SITE PHOTOS

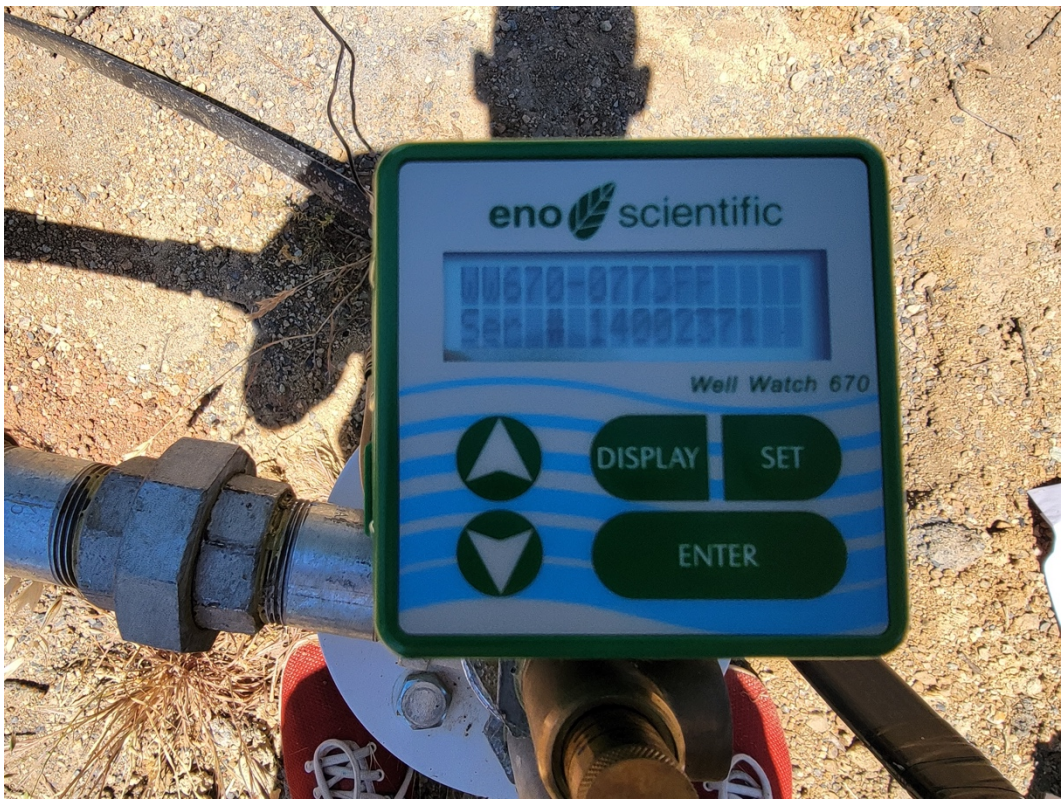
Access Road and Proposed Cultivation Areas “L” and “K” (west view)

Access Road and Proposed Cultivation Area “J” (west view)

Proposed Cultivation Area “J” (southeast view)

Proposed Drying & Harvest Storage Area/Existing Metal Barn (south view)

Existing Onsite Groundwater Well



ENO Scientific Well Watch 670 Sonic Water Level Meter on Groundwater Well