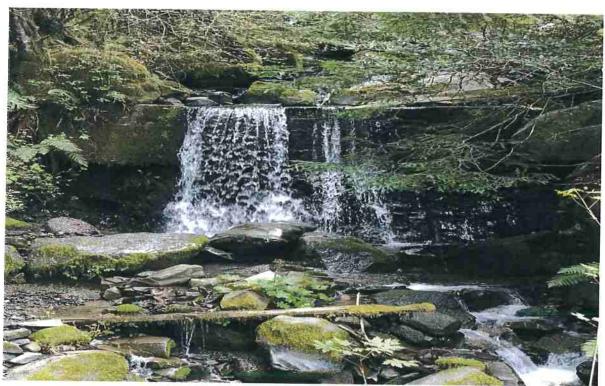
# Cultivation and Operations Plan For GROUND ZERO

APPS# 11945

APN 222-071-017

#### **Proposed Medical Cannabis Cultivation Facilities**



Prepared for:



Humboldt County Planning Department 3015 H Street Eureka, CA 95501



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#### 1. PROJECT SUMMARY

#### 1.1. PROJECT OBJECTIVE

GROUND ZERO APN#222-071-017 is proposing to permit existing medical cannabis cultivation activities in accordance with the County of Humboldt *Commercial Medical Marijuana Land Use Ordinance* (CMMLUO). The project requires a Zoning Clearance Certificate (ZCC) for a total of 10,000 sf of outdoor. There is no processing facility located on the parcel. There are two drying sheds as follow: Zone B (380 sf), Zone C (960 sf), and a barn in Zone A (720 sf). These sheds are used for drying, curing of medical cannabis. There is one storage shed in Zone B and one in Zone C and Zone A has a storage container. The storage sheds are used for storage for all cultivation related products as well as petroleum products. All petroleum and liquid fertilizers are stored in a secure location, with secondary containment ordered. The applicant aims to become fully compliant with State and Local Cultivation Regulations.

#### 1.2. SITE DESCRIPTION

The project site is located in Humboldt County, in the Garberville area, on the North and South side of Seeba Ln, approximately 4 miles Northeast from the intersection of Seeba Lane and West Moody Rd, on the property known as 3260 Seeba Ln. To reach the site from Eureka, take US-101 south for 77.3 miles. Take the Sprowel Creek Rd exit towards Garberville. Take a right onto Sprowel Creek Rd, Left onto Moody Rd, Right onto Oak Rock Rd, Left onto Seeba Ln. Approximate drive time from Eureka, CA 1 hour and 56 minutes. The site can be seen on section 21, township 5 south, range 3 east, Humboldt Meridian. Furthermore, the site is located at Latitude 40.0090 and Longitude, -123.8321. The subject parcel is approximately 62.5 acres in size (per Humboldt county WEBGIS).

#### 1.3. LAND USE

The subject property has a General Plan designation of Dispersed Housing as identified by the Northern Humboldt General Plan (NHGP) RA40 and is zoned AE-B-5(60).

#### 1.4. STATE AND LOCAL COMPLIANCE

#### 1.4.1. STATE OF CALIFORNIA COMMERCIAL CANNABIS ACTIVITY LICENSE

GROUND ZERO APN#222-071-017 will obtain a Commercial Cannabis Activity license from the State of California.

#### 1.4.2. STATE WATER RESOURCES CONTROL BOARD

The watercourses are two Class II watercourses that drains into Jones Creek just off the property. All watercourses on the property are not tributary to Indian Creek.

#### 1.4.3. NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD

GROUND ZERO APN#222-071-017 has enrolled with the North Coast Regional Water Quality Control Board (NCRWQCB) for coverage under Tier 2 of Order No. 2015-0023 Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effect in the North Coast Region (WDID 1B16204CHUM) A Lake Streambed Alteration Agreement was developed for the project by Stillwater Sciences and has been implemented for activities associated with onsite cultivation since June 28, 2015.

#### 1.4.4. HUMBOLDT COUNTY BUILDING DEPARTMENT

All necessary building permits will be obtained from the Humboldt County Building Department for all existing and proposed structures and supporting infrastructure upon approval of the Zoning Clearance Certificate.

#### 1.4.5. CAL FIRE

The subject property is located within a State Responsibility Area (SRA) for fire protection. Several improvements are proposed to meet SRA requirements, including designating a fire turn-around and pull-out area for emergency vehicles, and management of trees and vegetation around existing structures to maintain the required 100-foot defensible space. All structures on the property meet the 30-foot SRA setback requirement from property lines.

#### 1.4.6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

A Lake and Streambed Alteration Agreement (LSAA) from the Department of Fish and Wildlife (DFW) has been filed concerning the four encroachments to replace failing or undersized culverts. Any and all remediation or recommendations outlined in the Lake and Streambed Alteration Agreement (LSAA) will be met.

#### 2. CULTIVATION AND PROCESSING

#### 2.1. PROPAGATION AND INITIAL TRANSPLANT

Juvenile plants are propagated on site from 'mother plants' that demonstrate the desired genetics for the specific cannabis strain. Mother plants remain in the vegetative stage solely for propagation. Cuttings are sampled from the mother plants and are rooted into a growing medium, typically oasis cubes, to produce 'clones.' The clones are placed into the nursery, and once fully rooted they are transplanted directly into one (1) gallon plastic containers. The juvenile plants are irrigated using hand watering methods. After 2-3 weeks, the clones are then transplanted into 25-gallon plastic pots with a soil and perlite medium, and moved into outdoor greenhouse where they continue their 'vegetative' cycle.

#### 2.2. OUTDOOR CULTIVATION PLAN AND SCHEDULE

Cultivation will occur in  $\underline{\text{Zone A}}$  (2) greenhouses – 1,200 sf and 1,400 sf with one full sun cultivation area - 700 sf cultivation.  $\underline{\text{Zone B}}$  (4) cultivation greenhouses totaling 3,350 sf.  $\underline{\text{Zone C}}$  (2) - 150 sf and 800 sf with two full sun cultivation areas – 1,000 sf and 1,350 respectively. Total cultivation area of approximately 9,950 sq ft. The greenhouses consist of heavy gauge steel tubing, covered with a woven poly translucent opaque tarp. Each greenhouse is ventilated by intake and exhaust fans. The greenhouses utilize a combination of artificial light and light deprivation to produce up to two (2) flowering cycles per year. The monthly Cultivation Schedule in Appendix C details the cultivation activities associated with the mixed light cultivation operation for a typical two cycle year.

#### 2.3. IRRIGATION PLAN AND SCHEDULE

Irrigation and fertigation of plants occurs using top-feed hand watering methods. GROUND ZERO APN#222-071-017 maintains that irrigation and fertigation is more efficiently managed via hand watering, allowing for daily inspection of each plant by the cultivator and tailored irrigation and nutrient application depending on the needs of each individual plant.

#### 2.4. HARVESTING, DRYING, AND TRIMMING

Plants that are ready for harvest have their flowering branches removed and suspended in the drying room, which is equipped with ventilation fans and climate control measures. The drying process takes approximately one week.

The dried flowers are then bucked into manageable buds and transferred to an offsite, licensed processing facility.

#### 2.5. PROCESSING FACILITY

The only processing that will be done at this location will be the drying process. All other cannabis processing will occur at an offsite licensed processing facility

#### 2.6. EMPLOYEE PLAN

GROUND ZERO APN#222-071-017 is an owner-family-operated farm (3 persons). There will be no employees hired at this farm.

#### 2.7. SECURITY PLAN AND HOURS OF OPERATION

#### 2.7.1. FACILITY SECURITY

The cultivation facilities, including greenhouses and a drying processing building will be enclosed in a secure metal fence area with a locked privacy gate. The cultivation facilities all have security lights, security cameras and are monitored by community watch group.

#### 2.7.2. HOURS OF OPERATION

Activities associated with cultivation in the greenhouses (watering, transplanting, and harvesting) generally occur during daylight hours. All other activities such as processing typically occur no earlier than 7:00 AM and extend no later than 9:30 PM.

#### 3. ENVIRONMENT

#### 3.1. WATER SOURCE AND PROJECTED WATER USE

GROUND ZERO APN#222-071-017 utilizes water management strategies to conserve and reuse onsite water and fertilizers to achieve net zero discharge.

The table below outlines the estimated irrigation water usage for cultivation during a typical year. Variables such as weather conditions and specific cannabis strains will have a slight effect on water use.

Jan	Feb	Mar				Usage (					15.50
Jan	reb	IVIdi	April	May	June	July	Aug	Sept	Oct	Nov	Dec
0	0	0	9,000	0	0	0	0	0	5,000	0	0
Tab.	le 3.1: E	stimate	d Annua	al Irrigatio	n Water	Usage (0	Gallons)-1	Tank(s)		T BUILD	EAST.
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
0	0	0	0	20,000	20,000	22,000	22,000	20,000	0	0	0
Tabl	e 3.1: E	stimate	d Annua	al Irrigatio	n Water	Usage (C	Gallons)-F	Rain	11 15		
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
0	3,000	3,000	0	0	0	0	0	0	0	0	0

#### 3.2. WATER STORAGE

Water storage for irrigation use is provided in the form of water storage tanks/bladders. Existing water storage consist of Zone A has (3) 5,000 gallon tank, (2) 3,000 gallon tank, (3) 2,500 gallon tank for a total of water storage for Zone A 28,400 gallons. Zone B has (6) 3,000 gallon tank, (6) 2,500 gallon tank, and (2) 3,000 gallon bladder for a total of water storage for Zone B 39,000. Zone C has (7) 2,500 gallon tank for a total of water storage for Zone C 17,510. A (1) 5,000 gallon tank is located on the property for fire protection. In addition, a seasonal pond stores about 30,000 gallon of water. GROUND ZERO APN#222-071-017 has a total of 89,910 gallons of storage and with seasonal pond possible 119,910 water storage.

#### 3.3. SITE DRAINAGE, RUNOFF, AND EROSION CONTROL

GROUND ZERO APN#222-071-017 is enrolled with the North Coast Regional Water Quality Control Board (NCRWQCB) for Tier 2 coverage, in accordance with the NCRWQCB's recommendations. The drainage and erosion control measures described below are referenced from the WRPP in Appendix E.

#### 3.3.1. SITE DRAINAGE AND RUNOFF

Stillwater Sciences has been retained to provide the Water Board SMP. Date of completion December 31, 2018.

Fertilizers and amendments are stored appropriately inside the main structure at the upper cultivation site and occasionally in the lower storage shed. Fertilizers are used at approximately half the dosage guidelines provided by the manufacturer. No pesticides or herbicides are used on the property. All fuel is stored in the main structure in the upper cultivation area and consists only of three 5-gallon plastic hand cans. At no point on the property assessed were any cultivation related wastes found to be placed or treated outside the guidelines of the Standard Conditions.

#### 3.4. WATERSHED AND HABITAT PROTECTION

Water Board SMP will provide documentation that will ensure that the watershed and surrounding habitat are protected.

#### 3.5. MONITORING AND REPORTING

Monitoring will be conducted to confirm the effectiveness of corrected measures that will be documented in the Water Board SMP provided by Stillwater Sciences. Inspections will include photographic documentation of any controllable sediment discharge sites as identified on the site map. Visual inspection will occur at those locations on the site where pollutants or wastes, if uncontained, could be transported into receiving waters, and those locations where runoff from roads or developed areas drains into or towards surface water. The inspection will also document the progress of any plan element subject to a time schedule, or in the process of being implemented. A monitoring plan is included in the WRPP with photo points identified on WRPP map.

Onsite monitoring shall occur:

- Before and after any significant alteration or upgrade to a given stream crossing, road segment, or controllable sediment discharge site. Inspection should include photographic documentation, with photo records to be kept on site.
- Prior to October 15 and December 15 to evaluate site preparedness for storm events and storm water runoff.
- Following any rainfall event with an intensity of 3" precipitation in 24 hours. Precipitation data can be obtained from the National Weather Service by entering the site zip code at <a href="http://www.srh.noaa.gov/forecast">http://www.srh.noaa.gov/forecast</a>.

A Monitoring and Reporting Form (Order No. 2015-0023 Appendix C) will be submitted upon initial enrollment in the Order (NOI) and then annually by March 31 to the Regional Water Board. The annual report will include data from the monitoring reports.

#### 3.6. ENERGY AND GENERATOR USE

Use of the on-site (3) 3,000 watt, 70 decibles generator is limited to 17 hours a week during daylight hours to run well pump to fill tanks and run fans in drying and curing shed. The generator is located away from the property line to ensure the noise level does not exceed 60 decibels at the property line. The generator and diesel fuel is located by the storage shed. Secondary containment has been ordered for all fuel storage and generator locations.

#### 3.7. USE AND STORAGE OF REGULATED PRODUCTS

#### 3.7.1. BEST MANAGEMENT PRACTICES

Best Management Practices (BMP's) are employed when storing, handling, mixing, application and disposal of all fertilizers, pesticides and fungicides. All nutrients, pesticides and fungicides are in a locked storage room, and contained within water tight, locked and labeled containers in accordance with manufactures instruction. Application rates will be tracked and reported with the end of the year monitoring report required in the Water Resources Protection Plan (WRPP). Employees responsible for application are trained to handle, mix, apply or dispose of pesticides/fungicides with proper hand, eye body and respiratory protection in accordance with the manufacturer's recommendations. See the WRPP for complete BMP specifications for the use and storage of regulated products.

**GROUND ZERO** 

#### 3.7.2. FERTILIZERS

Nutrients and biological inoculants used for cultivation include:

- Dr. Earth Bloom (4-10-7)
- Down to Earth Bone Meal (3-15-0)
- Down to Earth Kelp (1-0.1-2)
- > 420 Fertilizer



- Roots Guanos?
- Stutzman Chicken Manure
- Earthworm Castings

See Appendix B - Regulated Products Resource List for product details.

#### 3.7.3. PESTICIDES AND FUNGICIDES

Pesticides and fungicides used for cultivation include:

- > Neem Oil
- > Plant Therapy
- Preditor Mites

See Appendix B - Regulated Products Resource List for product details.

#### 3.7.4. FUELS AND OILS

Fuels and oils stored on site include:

Three (3) 5-gallon fuel hand cans are stored inside each of the main structure.

There will be a storage shed that will contain the (3) 5-gallon gas cans. Secondary containment has been ordered for all petroleum products and all liquid fertilizers. Spill kits will be ordered as well and will be located at all fuel and generator locations.

#### 3.8. WASTE MANAGEMENT PLAN

#### 3.8.1. SOLID WASTE MANAGEMENT

Trash and recycling containers are located near the main residence and dry sheds processing building in safe enclosed location. Solid waste and recycling is hauled off-site to the nearest transfer station at least once per week.

#### 3.8.2. CULTIVATION WASTE AND SOIL MANAGEMENT

Stalks are composted or chipped for ground cover and compost. Root balls are hauled away as green waste or composted. Spent potting soil is stored in a contained area with environmental measures in place. Spent soil is cover during winter months and then amended in pots before the further use. All packaging from soil amendments and fertilizers will be collected and disposed at an appropriate facility.

#### 3.8.3. WASTEWATER MANAGEMENT

The water management plan aims to achieve an entirely closed-cycle irrigation and nutrient system. Hand watering methods minimize the over-irrigation of plants and subsequent runoff.

There is a working septic system that supports the parcel.

#### 4. PRODUCT MANAGEMENT

#### 4.1. PRODUCT TESTING AND LABELING

Samples are selected from individual harvested cannabis strains and are tested by a licensed third-party lab in accordance with State and local standards. The finished product is labeled with the GROUND ZERO APN#222-071-017. logo, and will include tracking ID's provided by the County of Humboldt and/or Statewide tracking systems

#### 4.2. PRODUCT INVENTORY AND TRACKING

The farmer will ensure all medical cannabis from clone to packaged product is tracked, accounted for and inventoried. Records are kept at each phase of the harvest and processing operation for reporting and compliance with State and Local regulations. The information recorded for each harvest includes:

- Cultivation canopy area
- Weight of flowers, by-product, and trim waste after drying and separation
- Weight of buds after trimming
- Product ID numbers and product weight
- > Staff identification (at each step)
- Physical location of the plant material always

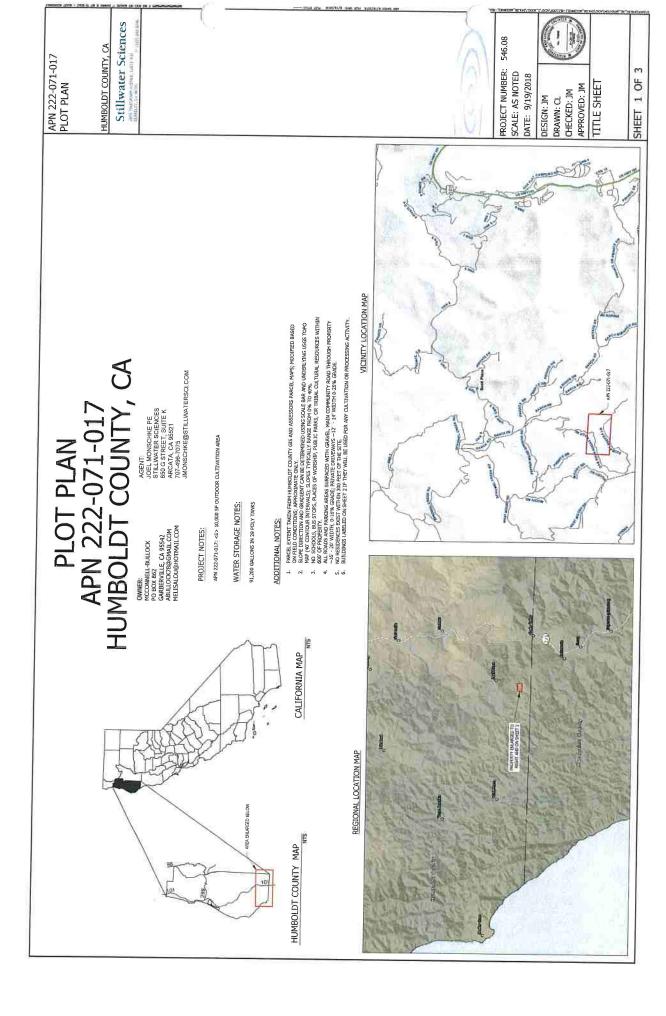
#### 4.3. TRANSPORTATION AND DISTRIBUTION

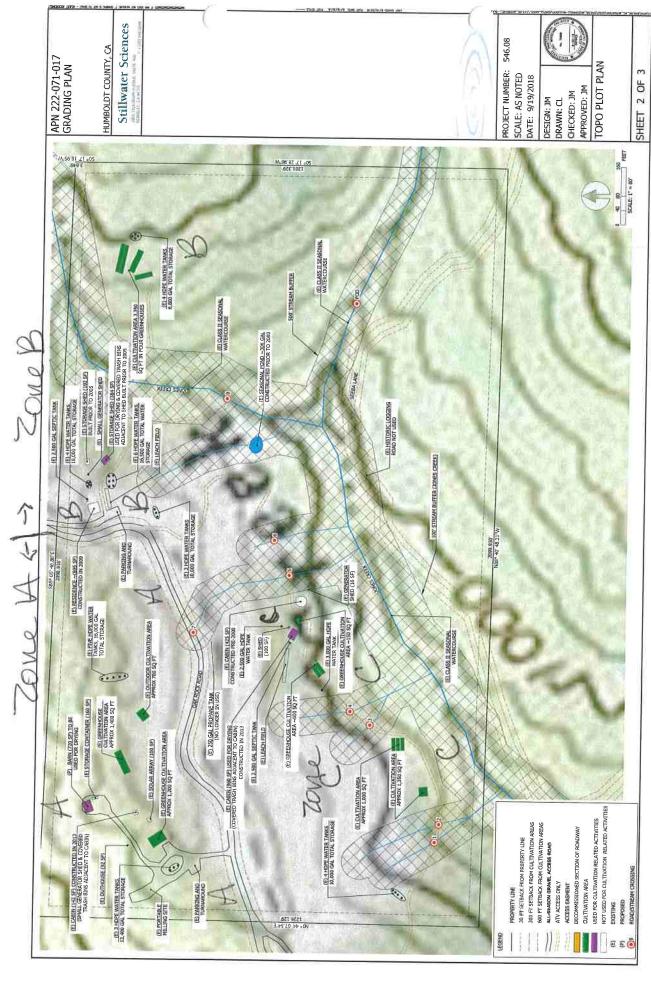
Transportation will be handled by a third-party, contracted, licensed transporter/distributer in accordance with State and Local regulations. All merchantable products will be distributed through licensed medical cannabis dispensaries. Prior to moving packages from the on-site holding facility to another physical location, a transport manifest will be created by the distributer/transporter and will include:

- Product ID numbers and product weight
- Route to be travelled
- Origin and destination addresses
- > Time of departure
- Time of arrival

The farmer will be responsible for performing a physical inventory of all packages being transported, and ensuring that the physical inventory coincides with the transport manifest.

## Appendix A: Site Plan





Zone H, B, C

Stillwater Sciences PROJECT NUMBER: 546.08 HUMBOLDT COUNTY, CA AERIAL PLOT PLAN APN 222-071-017 GRADING PLAN SCALE: AS NOTED DATE: 9/19/2018 SHEET 3 OF DESIGN: JM DRAWN: CL CHECKED: JM APPROVED: JM 180 160 IED CLASS II SEASONAL WATERCOLFISE 6,800 GAL TOTAL STDRAGE SDO STREAM BUTTER (E) CULTIVATION AREA 3.350 SQ FT IN FOUR CREENHOUSES CONSTRUCTED PRIOR TO 2000 (EL STORAGE SHED 1384 SF) USED FOR DRYING & COVERED TRASH BINS ADJACENT TO SHED BUILT PRIOR TO 2005 (E) STORAGE SHED (192 SF) BUILT PRIOR TO 2005 IEL SWALL GENERATOR SHED (E) + HDPE WATER TANKS
18,000 GAL TOTAL STORAGE (E) E HOPE WATER TANKS.
16,500 GAL TOTAL WATER
STORAGE 16) 3 HDPE WATER TANKS 10,000 GAL TOTAL STORAGE (E) OUTDOOR CULTIVATION AREA APPROX 700 SQ FT (E) 2.500 GAL HOPE WATER TANK (T) SHED (100 SF) CONSTRUCTED PRE-2000 COM TOOK NOW (E) GREENHOUSE CULTIVATION AREA ~800 SQ FT (E) 250 EAL PROPANE TANK (NO LONGER IN USE) E) STORAGE CONTAINER (160 SF) USED FOR DRYING (E) 2.500 GAL SEPTIC TANK (E) LEACH FIPLD (GOVERED TRASH BINS ADJACENT TO CABIN)
CONSTRUCTED IN 2013 JET GREEN-HOUSE CULTIVATION AREA APPROX 1,200 SQ FT (E) SOLAR ARRAY (100 SF) APPROX 1,350 SQ FT APPROX 1,000 SQ FT NOT USED FOR CULTIVATION RELATED ACTIVITIES 10,000 GAL TOTAL STORAGE USED FOR CULTIVATION RELATED ACTIVITIES 300 FT SETBACK FROM CULTIVATION AREAS 600 FT SETBACK FROM CALTIVATION AREAS (E) CARIN (142 SP) CONSTRUCTED IN AUTHOR (SMALL GENERATOR SHED & COVERED TRASH BINS ADJACENT TO CABIN) DECOMMISSIONED SECTION OF ROADWAY 30 FT SETBACK FROM PROPERTY LINE ALL SEASON GRAVEL ACCESS ROAD (E) O(TROUSE (22 ST) (E) PASKINE AND TURNASIONAL IE) 3 HDPE WATER TAMES 12,400 GAL TOTAL STORAGE CULTIVATION AREA ATV ACCESS ONLY ACCESS BASPERT PROPERTY LINE (E) PORTABLE MILLING SITE REED

ZONE A, B, C

#### **Appendix C: Cultivation Schedule**

February 1-April 1st: Clone Propagation

All plants used in GROUND ZERO APN#222-071-017 cultivation sites will be composed of clones taken from "mother" plants. Mother plants are composed of samples that have been deemed to demonstrate superior genetics for desired outcomes. Cuttings, or clones, are taken from the mother plants at various intervals.

Clones will be cut from mother plants and will be placed within trays to root. After approximately 2-3 weeks, rooted clones will be transferred to 5" by 5" pots within green houses to acclimate.

April 1 - April 15: Transplant Phase

When the plants have achieved desired height and plant growth density for transplant, the plants are immediately planted into 25" pots. Due to the increase in container size and increase in daylight hours, the plants will continue to grow in a vegetative state for 2-4 weeks. The approximate desired height and growth density would be 3'-4'. Upon final transplant, plants will be hand-watered and fertilized. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. Once the desired height and vegetative growth density has been achieved the Light Deprivation Phase begins.

April 15 - Jun 15: Light Deprivation Phase-Cycle 1

Taking into account factors such as height, growth density and overall health of the plant, determination of the exact date for the light deprivation process begins. Once that date is determined, 100% light resistant, specifically designed tarps will be automatically pulled over the outside of the greenhouses. This process will reduce the daylight hours from approximately fifteen (15) hours of daylight to the desired twelve (12) hours of daylight, twelve (12) hours of darkness desired to induce flowering. During the first two weeks of light deprivation, the plants will enter into a transitional phase. During this transitional phase plants, will continue vegetative growth while transitioning into flowering.

It is not uncommon for plants to obtain 25% of their entire height and vegetative growth density during the transitional phase. Once the plants enter in the final bloom or flowering phase, they will begin to expend energy into the production of flowers, therefore, ceasing vegetative growth and begin to flower. The entire flowering process, including the transitional and final bloom phases, will last fifty-five (55) to sixty-five (65) days depending on strain variation and weather conditions.

**GROUND ZERO** 

#### June 15 - 22: First Harvest and Re-Planting

Once the light deprivation phase has concluded and it has been determined that the plants are at their peak, harvest procedures will be initiated. (See Section 2.4 of the Cultivation and Operations Plan). The soil in the pots will be turned and amended. All amendments used are in accordance with Humboldt County and State of California Department of Agriculture compliance. New clones obtained from the "mother" will be transplanted into the greenhouses.

Due to the length of daylight hours, the plants will continue in a vegetative state for approximately one month. Plants will be planted using the same methodology as with the Transplant Phase.

June 22 – September 15: Light Deprivation-Cycle 2

See Light Deprivation-Cycle 1 for a description of activities during this phase.

September 15 - September 22 - Second Harvest and Re-Planting

See First Harvest and Re-Planting for a description of activities during this phase.

October 1 – February 1st- Repair, Upgrade and Recondition Phase

GROUND ZERO APN#221-061-034 will inspect all cold frames and covers for wear and replace as necessary. All watering hoses, etc. will be inspected and repaired or replaced, as appropriate. Refilling of irrigation tanks will commence in accordance with the Small Irrigation Use Registration and Conditions of the Department of Fish and Wildlife (DFW) Lake or Streambed Alteration Agreement (LSAA). Pots will be turned over and composted within the greenhouses to prepare for the upcoming season.

#### Appendix D: References

- a) Bass, Ronald E., Kenneth M. Bogdan, and Terry Rivasplata. 2013. CEQA Desktop. Point Arena, CA; Solano Book Press. Page 44.
- b) California Code of Regulations. Health and Safety Code Section 11357-11362.9. <a href="http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11357-11362.9">http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11357-11362.9</a>. > Date accessed: July 16, 2014.
- c) California NORML. SB 420 Establishes Prop. 215 Guidelines, Voluntary Patient Identification Card System. <a href="http://www.canorml.org/laws/sb420.html">http://www.canorml.org/laws/sb420.html</a>. Date accessed: July 21, 2014.
- d) County of Humboldt. Medical Marijuana Land Use Ordinance (MMLUO) Phase IV, Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for Medical Use (Staff Report to the Board of Supervisors). January 26, 2016. <a href="https://humboldt.legistar.com/Calendar.aspx">https://humboldt.legistar.com/Calendar.aspx</a>.> Date accessed: March 28, 2016.
- e) North Coast Regional Water Quality Control Board. 2016. *Cannabis Cultivation Waste Discharge Regulatory Program*. <a href="http://www.waterboards.ca.gov/northcoast/water-issues/programs/cannabis/">http://www.waterboards.ca.gov/northcoast/water-issues/programs/cannabis/</a>. Date accessed: March 28, 2016.
- f) State Board of Equalization. Information on the Sales and Registration for Marijuana Sellers. June 2007. <a href="http://www.boe.ca.gov/news/pdf/173.pdf">http://www.boe.ca.gov/news/pdf/173.pdf</a>.>
- g) State of California. Guidelines for the Security and Non-Diversion of Marijuana Grown for Medical Use.
- h) August 2008. <a href="http://www.ag.ca.gov/cms">http://www.ag.ca.gov/cms</a> attachments/press/pdfs/n1601 medicalmarijuanaguidelines.pdf>

GROUND ZERO

## Appendix E: Water Resources Protection Plan (WRPP)

Note: For brevity, only select pertinent sections of the WRIPP have been included. The complete plan including all BMP specifications and the Water Board Order is attached.

**GROUND ZERO** 



## **Cultivation Activity/Cycles**

There is one out door cycle, and one light deprivation cycle per year. No indoor, No artificial light used.

Zone A - light depervation and out door combined

Zone B - light depervation and out door combined

Zone C - light depervation and out door combined

## Water use and irrigation



Water is stored in water tanks throughout the year. Total water storage averages 88,200 gallons per year with a potential capacity of 100,000; that includes a 20,000 gallon seasonal pond.

Water is diverted into 500 gal-3000gal tanks by a solar lift pump, or gravity fed.

All irrigation is hand watering/gravity fed.

Average usage of stored water for domestic and garden use June-Sept: 15,000 gallons/month

Average usage of stored water for domestic and garden use Oct – May: 3,000 gallons/month



## Storage for Fertilizers and Pesticides

All packaged fertilizers are kept in leak proof containers up off the ground. Any bulk fertilizers are put on top of a tarp and also covered with a separate tarp. All pesticides are organic and kept in leak proof containers up off the ground. Pesticides are purchased as needed and used immediately, having limited storage time of maybe 7 days. Only 3 people, all owners of the property, have access to applying the pesticides or fertilizers. Once a fertilizer/ pesticide container is emptied it is recycled at the nearest transfer station.

### Yearly Activity Timeline 3260 Seeba Lane Garberville, Ca 95542 APN- 222-071-017



	Topography	Roads	Water/Power	Forests	Cultivated Land
January	-Assess Erosion	-Assess Culverts and Drainages	-Rainwater Catchment -Hydro System	_	-
February	-Maintain Erosion	-Maintain Erosion	-Fill Water Storage -Hydro System	-Burn Chip Material	-
March	-Assess Culverts and Drainages	-Assess Culverts and Drainages	-Fill Water Storage -Hydro System	-Burn Chip Material	-Fence Maintenance -Starts/ Clones
April	-	-	-Hydro System	-Mow Pastures -Weed Whip	-Starts/Clones -Mulch
Мау	l Mr	-	-Disconnect Diversion	-Fire Breaks	-Transplant -Light Dep
June	-	_	-Garden Irrigation	-Mow pastures -Weed Whip	-Transplant -Light Dep -Watering
July	-	_	-Assess Water System	-Weed Whip	-Amendments -Light Dep -Watering
August	-	-	-Assess Irrigation		-Harvesting Crop
September	-	-	-Assess Water System	-Assess Hazardous Trees	-Harvesting Crop
October -Maintain Erosion		-Assess Culverts and Drainages	-Rainwater Catchment	-Plant Any Native Vegetation -Burn Chip Material and Plant Native Seed	-Install Rainwater Harvesting System -Clean Up From Harvest
November	-Assess Erosion	-Assess Culverts and Drainages Maintain	-Switch to Hydro -Update Water System	-Remove Hazardous Trees	-Plant Cover Grop -Amend
December	-Assess Erosion/ Maintain as needed	-	-Hydro System	-Remove Hazardous Trees	-Mulch

## Processing Plan

Bullock- McConnell

3260 Seeba Lane

Garberville Ca 95542

APN# 222-071-017-000



- Harvesting cannabis occurs 2 times per year
- After harvesting, a portion of the product will be dried in drying tents once dry it will be taken for further processing off site; the remaining product will be cut and taken fresh to a manufacturing facility
- Future plans for an AG exempt permitted drying and/or processing facility will be built if approved by Humboldt County Planning Dept

## Description of Water Storage/ Water Storage

- Amount of water storage currently available on parcel is 88,200 gallons
- Currently, parcel collection is through the creek between the dates of November 1st May 31st yearly; partial rainwater catchment is collected from rooftops during rain season
- Future plans to convert all water source collection from rain catchment system solely for agriculture and livestock
- Future water source expansion capacity will include a 100,000 gallon seasonal rain catchment pond once approved with permits and proper environmental conditions

Processing Plan APN- 222-071-017 3260 Seeba Lane Garberville, CA 95542

Once each greenhouse is ready for harvesting it is cut from the base of the plant and taken to Zone C for drying which can take 1-2 weeks to complete. Once the harvest is finally dry it is cut down into smaller more manageable pieces (called bucking down) and brought to Zone B in totes. Employees then continue to break down the harvest and manicure it for packaging. Packaging and storing occurs in Zone A. Product remains here until distributed.

Applicant(s): APN: 222 Address: 2		
Please provid	de a statement describing the proposed security measures for the facility that shall be sufficient to afety of members and employees and protect the premises from theft.	8)
engui e trie se	arety of members and employees and protect the premises from theft.	1
Types of Sec	curity Measure . GECENED	
THE CONTRACT OFFICE	AUG - 2 2017	
Yes No	and Con-	STA_
× D	Security Lighting	ON
· · · · · · · · · · · · · · · · · · ·	rocken prilaing and acrocrates	
00	Security Cameras	
	□ Video Storage?	
Ma	Security Alarm	
- t~	☐ Monitored	
河口	Access Control   By who	
!	(LE. What method(s) are used to prevent non-legitimate farm workers/members of the	
a .	collective from accessing any cannabis related are?)	
333	HI tarts are locked and Gated	
	Commute Watch	
•		
T.A.	Contracted Security Company Onsite Staff	
A.	10.11.711	
*	Hours Present to Days/week 4+ 41 IMES	8
	If yes.	
2 10	☐ Constrained or restrained for inspections?	
List oth	ner Security Measures:	