



Xotic Flavorz, LLC

Noise Source Assessment and Mitigation Plan

APN: 107-272-007

Humboldt County, CA

November 2021

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A: Site Map

B. Equipment Specifications



Objective

The purpose of this Noise Source Assessment and Mitigation Plan is to evaluate the potential impacts from the proposed project and describe how the project will conform with the Performance Standard set forth in Section 55.4.12.6 – Performance Standard for Noise at Cultivation Sites in the Humboldt County Commercial Cannabis Land Use Ordinance (CCLUO) – Coastal Zone. Evaluation of potential noise impacts included the establishment of onsite ambient and maximum noise levels, identification of proposed project noise sources, and modeling of proposed project noise sources in relation to current onsite noise.

Proposed Project Overview

Xotic Flavorz, LLC is proposing to permit 33,560 square feet (sq. ft.) of new outdoor commercial cannabis cultivation activities in accordance with the County of Humboldt's (County) *Commercial Cannabis Land Use Ordinance* (CCLUO), aka "Ordinance 2.0" on APN 107-272-007.

Table 1. Proposed Cannabis Activities and Associated Locations (refer to Appendix A – Site Plans)

	Table 1. Proposed Site Activ	rities
Outdoor Cultivation (sq. ft.) Ancillary Nursery (sq. ft		
Proposed Project	33,560 (new)	3,300

This proposal includes 33,560 sq. ft. of new outdoor cultivation in (6) 34′ x 150′ greenhouses and (1) 20′ x 150′ greenhouse, 3,300 sq. ft. of ancillary nursery in a 22′ x 150′ greenhouse, onsite drying, and onsite processing. Processing would occur onsite in the approved 1,152 sq. ft. commercial processing building (Approved per Apps No. 11067, see Table 2 below). Water would be sourced from an existing 2-million gallon rainwater catchment pond that serves the existing site activities. Power would come from an existing PG&E service and proposed upgrade currently in the works. The proposed cultivation activities would require 10 employees. The applicant aims to be in compliance with all state and local regulations.

Approved Site Activities

Xotic Flavorz, LLC has an approved Special Permit for approximately 5,000-sf of pre-existing outdoor and approximately 5,000-sf of pre-existing mixed-light cultivation (App. No. 11067) and an approved Zoning Clearance Certificate for 33,330 sf of RRR cultivation comprised of 13,330-sf of outdoor cultivation from APN 107-300-006 (App. No. 12336) and 20,000 sf of mixed-light cultivation from APN 107-300-007 (App. No. 13027).

Approval for Apps No. 11067 also included on-site processing in a 4,200-sf building, 4,330 sq. ft. of ancillary nursery, and ancillary drying activities. A Minor Deviation (PLN-2021-17207) was approved in June 2021 to allow for greenhouse reconfiguration and the construction of a new, 1,152-sq. ft. commercial building for processing activities.



	Outdoor Cultivation (sq. ft.)	Mixed-Light Cultivation (sq. ft.)	Processing (sq. ft.)	Ancillary Nursery (sq. ft.)
Approved SP Apps No. 11067	5,000 (pre-2016)	5,000 (pre-2016)	4,200	4,330
Approved ZCC Apps No. 12336	13,330 (RRR)			Anni de la constante
Approved ZCC Apps No. 13027		20,000 (RRR)		
Totals	43,330 sq. ft.		4,200	4,330

Site Description and Sensitive Receptors

The Project is located at 270 Applewood Road, in the community of Honeydew (APN 107-272-007). The subject parcel is approximately 13.2 acres in size (per the County of Humboldt's WebGIS), with gentle slopes less than 7% gradient with drainage flowing towards the south of the property. The parcel is mostly grassland located on a flood plain terrace of the Mattole River (Lower Mattole River Watershed) at an elevation of approximately 450-ft above mean sea level. The site is used for agricultural and domestic purposes. The property contains an existing 2-million gallon rainwater catchment pond, and a historic onstream pond exists near the residence (unrelated to proposed project). In addition to the existing cannabis activities, the project includes a residence, a residential accessory building, and domestic garden/orchard activities. The property contains 575,428 sq. ft. of prime agricultural land according to Humboldt County WebGIS, of which the approved project comprises 51,212 sq. ft. (8.8%) and the proposed project comprises an additional 36,860 sq. ft. (6.4%) for a total of 88,072 sq. ft. or 15% of prime agricultural land.

The subject property is located outside of the Coastal Zone and within the State Fire Responsibility Area, with a Humboldt County General Plan designation of Agricultural Exclusive (AE) and zoning of Agricultural General with Combined Zone (AG-B-6). Land uses surrounding the parcel are comprised of agriculture lands and agriculture grazing. The surrounding parcels are zoned Agricultural Exclusive (AE). The nearest mapped Public Lands are located over 1,900 feet from proposed project activities.

Analysis of Existing Ambient Noise Levels

This section summarizes the data collection procedures that were taken to analyze the existing ambient noise levels within the project site. The *existing ambient noise level* is defined as the baseline of sound pressure experienced in an area prior to the proposed cannabis cultivation activities. Existing ambient noise levels included natural and human-induced noise.



Four (4) Monitoring Locations were established throughout the parcel to establish noise levels at property lines (closest to sensitive receptors such as neighboring houses) and habitat areas (closest to sensitive receptors such as wildlife). Table 2 below describes the Monitoring Locations in more detail and the locations can be seen on the site map attached in Appendix A.

Table 2: Monitoring Location Details

Monitoring Location	Lat/Long	Description & Notes	Impact Potential
#1	40.24143°, -124.11372°	Adjacent to southeast property boundary, along private driveway.	Adjacent parcel, Neighboring residence, and Habitat
#2	40.24259°, -124.11592°	Adjacent to cultivation area and west property boundary.	Adjacent parcel, Neighboring residence, and Habitat
#3	40.24360°, -124.11427°	Adjacent to north property boundary and Applewood Rd.	Adjacent parcel and Habitat.

The sound pressure level was measured in decibels using a type 2 digital sound meter which utilizes an A-weighted filter network (dB(A)). The digital sound meter was mounted to a tripod, allowing it to be positioned approximately 2 feet above the ground to minimize ground noise and maximize unobstructed sound readings. Measurements were taken on April 5th and 24th 2021, which was a warm, sunny day with a strong intermittent breeze.

Measurement readings of 15 minutes were taken at Monitoring Locations 1-3 and 24 hours at monitoring location 4. The 24 hour-monitoring required overnight supervision due to the risk of theft from ongoing security concerns at the site. During the 15-minute increment readings, data was collected on the noise levels and detailed notes were taken whenever the noise level increased from outside activity. During the measurements, extreme care was taken to minimize noise disturbance from the operator. Recordings of noise levels began once all rustling from the operator was not interfering the meter.

After the measurements were taken, a log was created detailing what outside activity was associated with the increased noise level. The data was then analyzed to determine the existing ambient noise levels. The results from this analysis are presented in Table 3. Table 3 displays the Monitoring Location, the average decibel reading throughout the measurement, and the maximum decibel reading.

Table 3: Onsite Noise Analysis Results

Location	Measurement Length (hours)	Average Decibel	Max Noise Level
		Reading (dBA)	Measured (dBA)
#1	24	49.9	82.8
#2	24	41.3	66.0
#3	24	47.2	86.8

The existing ambient noise levels range from approximately 41 dBA to 50 dBA, with an average of 44 dBA. Maximum noise levels ranged from 66 to 86.8 dBA. Vehicles driving on Applewood Rd were likely the loudest local source of noise.



Noise Sources Associated with Proposed Project

Noise sources associated with proposed project will be primarily air circulation from the fans in the proposed expansion of outdoor cultivation. The proposed cultivation greenhouses will each utilize up to nine (9) "Hurricane® Pro 24 in Heavy Duty Adjustable Tilt Drum Fans", or similar fans. Specifications from similar fans have a noise rating range of 60-69 dBA (distance unspecified, assumed 2 meters). All equipment specifications have been provided by the applicant. See Table 4 and Appendix B.

Table 4: Noise-Producing Cultivation Equipment Specifications

Type of Equipment	Brand*	Sound Pressure (dBA)
Pro 24" Adjustable Tilt Drum	Hurricane	Spec not published;
Fan		similar fans report
		between 60-69 dBA

^{*}Specific equipment brands subject to change

Other noise sources associated with project expansion include employee activity, traffic, and onsite processing in the approved, enclosed commercial building. However, these activities are not anticipated to produce any additional noise relative to the existing ambient noise levels.

Anticipated Noise Levels and Proposed Noise Attenuation Measures

The proposed noise attenuation measures to ensure the daily operations comply with the CCULO will consist of manual controls and monitoring. Each of the Hurricane® Pro 24 in Heavy Duty Adjustable Tilt Drum Fans will be equipped with a variable speed controller, allowing for precise adjustment of the fan speed (fan speed directly correlates to fan sound pressure). Measuring of noise levels will continues on a regular basis following the proposed activities. If the noise levels are measured to be higher than the anticipated levels, the fans will be adjusted, reducing the noise output from the fans, and reducing the noise impact at the subject monitoring location.

Furthermore, cannabis-related activities would be contained within enclosed greenhouse structures, which would muffle the projected sound pressure of proposed activities. Noise from the proposed cultivation activities is not anticipated to result in an increase of more than three (3) decibels of continuous noise above existing ambient noise levels, which range from 41.3 to 49.9 dBA. Furthermore, based on equipment specifications, the noise levels at all Monitoring Locations are anticipated to be less than 50 dBA.

Monitoring

Measuring of noise levels will continue on a regular basis following the proposed activities. If the noise levels are measured to be higher than the anticipated levels, further measures will be implemented to reduce the noise output from the project's activity.

Off-site noise includes, but is not limited to, neighboring or adjacent resident activity, nearby vehicle traffic, and all other activities not related to the proposed project or parcel.

In order to ensure that cultivation activities comply with the Performance Standards, future noise measurements will be taken at the same monitoring locations to ensure no disturbance is occurring to habitat or to neighboring residences.

Conclusion

The existing ambient noise levels range from approximately 41 to 50 dBA, with an average of 46 dBA. Maximum noise levels ranged from 66 to 87 dBA. Vehicle traffic on Applewood Rd was likely the loudest noise-producing activity in the vicinity of the proposed expansion of outdoor cultivation.

Xotic Flavorz, LLC aims to meet the noise levels and mitigations set forth in this report. Following the recommendations set forth in this report, the proposed noise sources from the project are not expected to increase onsite ambient noise levels and compliance with Performance Standard 55.4.12.6 will be met. Noise from the proposed cultivation activities is not anticipated to result in an increase of more than three (3) decibels of continuous noise above existing ambient noise levels (46 dBA). Furthermore, the noise levels at all Monitoring Locations are anticipated to be less than 50 dBA.



- ±13.21 ACRES - PRIVATE

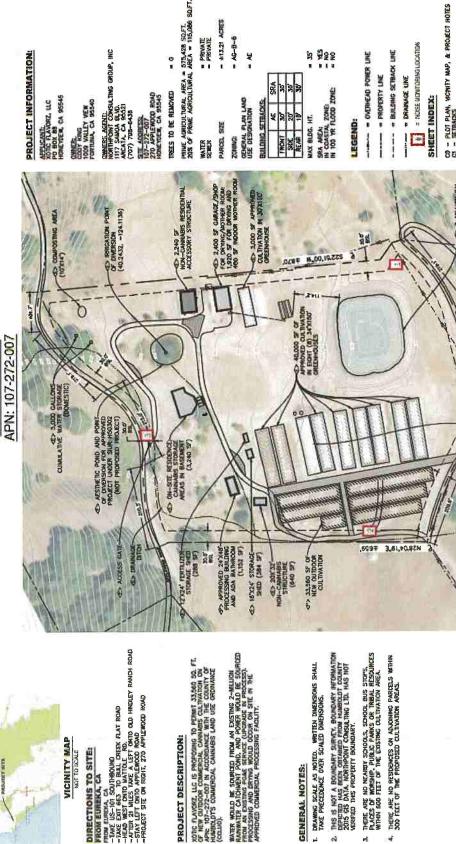
- AG-B-6

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XOTIC FLAVORZ,

SPECIAL PERMIT

PLOT PLAN



MATER WOLLD BE SOURCED FROM AN EXISTING 2-MILLIGH FAMINITE CATCHART FORD, AND POMEN WOLLD BE SOURCED FROM AN EXISTING FAME STRANE (LIFEABLE IN PROCESS). PROCESSIAN AND EXISTING WOLLD OCCUR ON SITE IN THE PAPERDICE COLUMERAL, PROCESSIAN FACULTY.

XOTE FLANDEZ LLE IS PROPOGING TO PETRIET 33,560 90, FT. THE CUITON COMMENDEZ CONNECTION ON APIX 107 - 272-007 IN ACCIDIANCE WITH THE COUNTY OF MINISTER CONTRACTOR CANNOTES LAND USE ORDINANCE (COLID).

PROJECT DESCRIPTION:

VICINITY MAP

DIRECTIONS TO SITE:

THERE ARE NO MEARIY SCHOOLS, SCHOOL, BUS STOPS, PLACES OF WOMSHIP, PUBLIC PANKS OR THEAL RESOURCES WITHIN SOO FEET OF THE EXISTING CALTIVATION AREA.

THERE ARE NO RESIDENCES ON ADJOINING PARCELS WITHIN 300 FEET OF THE PROPOSED CULTIVATION AREAS.

THIS IS NOT A BOUNDARY SURVEY, BOUNDARY INTORNATION CEPTICED HAS EXECUTED FROM HAMBOLAT COLUNTY COTS, GIS DATA, NORTHEOMY CONSULTING LTD, MAS NOT VERHEID THIS PROPERTY BOUNDARY.

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DRAWING SCALE AS NOTED. WINTTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.

GENERAL NOTES:

LEGEND:

N 255

MX BLDG. HT.

---- - OVERHEAD POWER LINE --- - BUILDING SCTBACK LINE - PROPERTY LINE

= NOSE MONTORING LIDICATION TOWNWACE LINE

SHEET INDEX:

CD - PLOT PLAN, WCNITY MAP, & PROJECT NOTES CT - SCHACKS C2 - ENSTNG AND PROPOSED SITE PLAN

22234 SHEET: 1"=80" 11x7 SHEET: 1"=180" PLOT PLAN

OLD HNOLEY RANCH ROAD

Hurricane® Pro High Velocity Metal Floor Fan 20 in

Overview Documents

Specs

480

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Бомпрас гладе 🏝



Hurricane® Pro High Velocity Metal Floor Fan 20 in

greenhouses, gerages, workshops and other areas thet may need a heavy-duty floor fan. Comes with an easily assembled tube base and rubber feet. This fan is mede rugged with all-metal construction and a black powder-coated finish. The fan blades are mede of aluminum, ic has 3 speed settings and adjustable tilt. The crit housing even has a built-in handle. Rens at 4500 CFM and 1400 APM. It has a 5 ft 120 V power tord. The Hurricanes Pro 20 in High Velocity Macal Place Fax is a porcebie for that takes up a small Toccorns. This fax is seas for homes,

Technical Specs

Oscillating	ON
Voltage	120
Amos - High	1.20
Air Flow (CFM) - High	4500
RPM -High	1450
Length (Inches)	24.0
Height (inches)	22.0
Guard Material	Steel
NEMA Plug Colfiguration	5-159
Cord Length	SE

Number of Speeds	
na T	60
Wacts - High	145
CFM Per Watt	31
Slade Diameter	19.4
width (Inches)	11.0
Number of Blades	m
Blage Mecedal	Aluminum
Number of Conductors	No

HUITICANE BRUM FANS



HGC736485

MADE FOR BIG JOBS. IDEAL FOR HOME, GREENHOUSES, GARAGES, WORKSHOPS AND OTHER AREAS THAT MAY NEED A HEAVY DUTY PORTABLE DRUM FAN.

STANDARD FEATURES:

- ALL METAL CONSTRUCTION
- ALUMINUM BLADES
- 3.SPEED SETTINGS
- O POWDER COATED FINISH
- PORTABLE DESIGN
- 6! POWER CORD

HEAVY DUTY ADJ.

- AIR VELOCITY M3/Min. 204
- 7,195 CFM · 850 RPM
- ADJUSTABLE TILT
 - WATTS: 395

30"

#HGC736486 HEAVY DUTY ADJ. TILT DRUM FAN

- AIR VELOCITY M³/Min. 264
- 9.295 CFM 850 RPM
- ADJUSTABLE TILT
- MATTS: 450 VOLTS: 120

36"

#HGC736487 HEAVY DUTY ADJ. TILT DRUM FAN

- AIR VELOCITY M³/Min. 457
- 16,090 CFM 850 RPM
- ADJUSTABLE TILT
- MATTS: 615 VOLTS: 120



#HGC736488 HEAVY DUTY ADJ. TILT DRUM FAN

- AIR VELOCITY M³/Min. 506
- 17,820 CFM 850 RPM
- ADJUSTABLE TILT
- AMPS: 5.3
 WATTS: 615
 VOLTS: 120





When purchased from an authorized Hawthome dealer, this product is covered by a Limited Warranty available at hawthornegc.com/warranties.

Item No.	Descriptions	MSRP
HGC736485	Heavy Duty Adjustable Tilt Drum Fan 24"	\$229.95
HGC736486	Heavy Duty Adjustable Tilt Drum Fan 30"	\$289.95
HGC736487	Heavy Duty Adjustable Tilt Drum Fan 36"	\$359.95
HGC736488	Heavy Duty Adjustable Tilt Drum Fan 42"	\$439.95