

ATTACHMENT 1B

Cultivation and Operations Plan



NORTH WIND MANAGEMENT, LLC
APN: 401-112-030
Cultivation and Operations Manual
Humboldt County, CA

Commercial Cannabis Facilities

PREPARED FOR:



September 2021
Updated February 2022
Updated September 2022

Commercial Cannabis Cultivation Facilities
APN: 401-112-030

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September 2021
Updated February 2022
Updated September 2022

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1. PROJECT SUMMARY

1.1. PROJECT OBJECTIVE

North Wind Management, LLC is proposing to permit commercial cannabis activities in accordance with the County of Humboldt’s (County) *Commercial Cannabis Land Use Ordinance* (CCLUO - Coastal), aka “Ordinance 2.0” on a legal parcel, APN 401-112-030, near the community of Samoa in Humboldt County, California. The project requires a Conditional Use Permit and a Coastal Development permit for indoor commercial cannabis cultivation, off-site commercial processing, distribution, infusion, non-volatile manufacturing, and volatile manufacturing.

Specifically, the proposal includes 1 acre of indoor cultivation, ±2,434 square feet (sq. ft.) of off-site commercial processing, ±5,000 sq. ft. of distribution, 1,000 sq. ft. of infusion, ±480 sq. ft. of non-volatile manufacturing, ±480 sq. ft. of volatile manufacturing, and ±4,640 sq. ft. of conditioned off-site product storage area (Table 1). The project proposal includes permitting of both new and existing structures as well as ancillary activities (including ancillary nursery, drying, and trimming) appurtenant to the cultivation activities. The proposed cannabis activities and associated locations are summarized in Table 1.

Water for the project is proposed to be sourced from municipal water through the Humboldt Bay Municipal Water District (HBMWB). Power is proposed to be sourced from the REPower+ plan through an existing PG&E service and proposed upgrade. Up to 40 employees are proposed to run the operation at peak activities. The project will conform to all Adaptive Reuse Standards for Industrial Sites.

Table 1. Proposed Cannabis Activities and Associated Locations (refer to Appendix A – Site Plans)									
	<i>Proposed Discretionary Activities (± sq. ft.)</i>						<i>Proposed Activities Ancillary to Cultivation (± sq. ft.)</i>		
	Indoor Cannabis Cultivation	Off-site Commercial Processing	Distribution	Infusion	Off-site Product Storage	Manufacturing	Ancillary Nursery (10%)	Ancillary Drying	Ancillary Processing
<P> Building 1 (185' x 275')	43,560	-	-	-	-	-	4,350	10,000	5,000
<E> Building 2; Office Building (16,667 sf)	-	-	5,000	-	-	-	-	-	-
<E> Building 3; Secondary Office Building (4,799 sf)	-	2,434	-	1,000	-	-	-	-	-
<P> (2) Modular Structures (12' x 40' each)	-	-	-	-	-	480 (non-volatile) 480 (volatile)	-	-	-
<P> (29) Shipping Container (8' x 20' each)	-	-	-	-	4,640	-	-	-	-
Totals (sf)	43,560	2,434	5,000	1,000	4,640	960	4,350	10,000	5,000



Figure 1 (above): Aerial View of Project Parcel; Property Boundary in Red (Source: Google Earth, April 2019)



Figure 2 (below): Aerial 3D Image of Project Parcel (Source: Google Earth, April 2019)

1.2. SITE LOCATION AND DESCRIPTION

The proposed project site is approximately 19.07 acres and located in the unincorporated area of Humboldt County at 936 Vance Ave on the Samoa Peninsula, west of Humboldt Bay and east of the Pacific Ocean. The project is located on APN 401-112-030, in the northwest $\frac{1}{4}$ of Section 21, Township 5 North, Range 1 West (Humboldt Meridian). It is accessed off of Vance Avenue, a paved county-maintained road, which is accessed off of California State Highway 255.

The site was part of the historic Samoa Pulp Mill lumber mill activities (See Section 1.3, below). Existing structures onsite include a multi-story historic chip silo building (approximately 5,000 sq. ft.) and conveyor belt, a two-story primary office building (16,667 sq. ft., “Building 2” on Site Plans), and a secondary office building (approximately 4,799 sq. ft., “Building 3” on site plans). These three structures were constructed in the 1960s/70s as part of lumber mill development.

The project site is in California Coastal Zone within the Appeal Zone jurisdiction. The site is in the Humboldt Bay HUC 12 watershed within the Eureka Planning Watershed. A freshwater emergent wetland is mapped by the National Wetland Inventory in the northern area of the parcel (not proposed for any development related to this project). All proposed cannabis activity would be located well over 150’ from these areas. No stream crossings exist onsite.

All cannabis development is proposed to be located on slopes of less than 5% on existing pavement. The site does not have a history of historic landslides and is not located within an earthquake fault hazard zone. The site is located in a moderate instable seismic zone, partially in a moderate Fire Hazard Severity Zone and outside of the flood zone. The parcel is in a coastal area, outside of predicted 1.0-meter level of sea level rise and is within a Tsunami Hazard and Evacuation Area. No prime agricultural soils are located onsite.

No vegetation is proposed to be disturbed and no trees are proposed to be removed as a part of this project.

1.3. SITE HISTORIC USE

The subject property is located on a heavy industrial site, historically used for mill and other industrial activities. The site was developed as part of the Samoa Pulp Mill in the 1960s by Georgia-Pacific Corporation. The property was developed with infrastructure to support mill operations, including the construction of existing onsite structures including the wood chip silo and conveyor belt, the office building (Building 2 – See Site Plans), and the secondary office (Building 3 – See Site Plans). The wood chip silo is defunct and is not part of the proposed project. A railroad was also developed as part of mill operations in the northwestern area of the property. The

Samoa Pulp Mill was in operation until 2008. Since its closure, the subject property has been used by tenants for a variety of commercial and industrial purposes. Currently, the site is leased to tenants to utilize the office space within Building 2.

1.4. ZONING AND LAND USE

The developed area onsite is an unused historical mill site. The site is zoned Industrial/Coastal-Dependent (MC) and Industrial General (MG), with proposed commercial cannabis activity occurring on MC-zoned areas of the property. The MC-zone also includes a Combining Zone of Archaeological Resource Area Outside Shelter Cove (A). The surrounding parcels are zoned MC and MG. The property and the surrounding properties have land use designations of Industrial/Coastal Dependent and Industrial General (MC; MG). The surrounding properties include a historic mill site and existing industrial and commercial sites, as well as natural resource areas adjacent to the Pacific Ocean.



Figure 3: Subject Parcel Zoning (Source: Humboldt Web GIS, 2021)

1.4. SCHEDULE OF CONSTRUCTION

North Wind Management, LLC will construct proposed facilities and occupy existing facilities after the project has been approved and they have received required building permits. All work will be done in accordance with local and State environmental and safety regulations. Permits will be sought prior to construction from all applicable agencies. Ideally, proposed facilities will be designed, permitted and constructed in 2022, pending the permit issuance date(s).

1.5. STATE AND LOCAL AGENCY COMPLIANCE

1.5.1. HUMBOLDT COUNTY PLANNING AND BUILDING DEPARTMENT

This application for Conditional Use Permit is in accordance with the CCLUO. Upon project approval, all necessary building permits will be obtained from the Humboldt County Building Department for all applicable existing/proposed structures and supporting infrastructure. All proposed structures will be constructed and designed in conformance with the California Building Code.

1.5.2. CALIFORNIA COASTAL COMMISSION

The subject parcel is located within the Coastal Zone and a Coastal Development Permit is being sought for proposed onsite activities. The proposed cannabis development is located in the Appeal Zone jurisdiction. Through correspondence with Humboldt County and the Coastal Commission, it is anticipated that Humboldt County will be processing the Coastal Development Permit with the Conditional Use Permit application.

1.5.3. HUMBOLDT BAY MUNICIPAL WATER DISTRICT

The Humboldt Bay Municipal Water District (HBMWD) provides water and sewer services to the unincorporated community of Samoa and the project site. Currently, the HBMWD serves water to the property and all adjacent properties. North Wind Management, LLC is in the progress of obtaining a will-serve letter, stating they will serve water and sewer for the proposed cannabis project.

1.5.4. DEPARTMENT OF CANNABIS CONTROL – STATE LICENSING

North Wind Management, LLC will obtain licenses from the State of California once the local approval has been received, including commercial cannabis cultivation, nursery, and processor licenses from the Department of Cannabis Control (DCC).

1.5.5. STATE WATER RESOURCES CONTROL BOARD – WATER RIGHTS

The water source for the project will be municipally sourced through the HBMWD. No water rights are required for municipal water.

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

Prior to the commencement of cannabis-related activities onsite, the applicants will enroll for coverage with the State Water Resources Control Board (SWRCB) General Order WQ 2019-0001-DWQ *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Dischargers of Waste Associated with Cannabis Cultivation Activities* (“Order”). The purpose of the SWRCB Order is to implement the requirements for waste discharges associated with cannabis cultivation as described in SWRCB’s *Cannabis Cultivation Policy – Principles and Guidelines for Cannabis Cultivation* (“Policy”). It is anticipated that this project would qualify for a Conditional Exemption for Indoor Cultivation.

Since, the project may disturb more than one acre in constructing the warehouse building, the project could be subject to the requirements SWRCB Construction General Permit (CGP, 2009-009-DWQ). The SWRCB CGP would require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) and Erosion Control Plan which documents the stormwater dynamics at the site, the Best Management Practices (BMPs), and water quality protection measures that are used, and the frequency of inspections. BMPs are activities or measures determined to be practicable, acceptable to the public, and cost effective in preventing water pollution or reducing the amount of pollution generated by non-point sources. Obtainment of a CGP is also a BPTC Measure for compliance with the SWRCB Cannabis Cultivation General Order.

1.5.7. LOCAL FIRE DEPARTMENT

The subject property is located within a Local Responsibility Area (LRA) for fire protection, and the site is located within the Samoa Peninsula Fire Protection District. All proposed structures on the property will exceed a 30-foot setback requirement from property lines. Adequate fire truck turn-arounds currently exist on the property, and additional fire protection improvements will be implemented onsite as required by local agencies.

1.5.8. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

There are no streams, ponds, or points of diversion onsite. A no jurisdictional Items notification will be submitted for the project site. See the Biological Resources Assessment prepared by Timberland Resource Consultants (2021) for details on biological resources and resource protection.

1.5.9. CULTURAL RESOURCES

A Cultural Resources Investigation was prepared by William Rich and Associates in 2021. Ground disturbance will be minimized where feasible. If buried archaeological or historical resources are encountered during construction or cultivation activities, the applicant or contractor shall call all work in the immediate area to a temporary halt, and a qualified archaeologist will be contacted to evaluate the materials. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, dietary bone, and human burials. If human burial is found during construction, state law requires that the County Coroner be contacted immediately. If the remains are found to be those of a Native American, the California Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains. The applicant is ultimately responsible for ensuring compliance with this condition.

2. COMMERCIAL CULTIVATION, OFF-SITE PROCESSING, DISTRIBUTION, INFUSION, AND MANUFACTURING ACTIVITIES

2.1. INDOOR CANNABIS CULTIVATION

2.1.1. PROPAGATION AND INITIAL TRANSPORT

The applicants propose to propagate juvenile plants used in flowering cultivation onsite in approximately 4,350 sq. ft. of nursery space ancillary to the indoor cultivation. Nursery space will be located in the proposed 185' x 275' building (Building 1) and would include approximately 2,610 sq. ft. of mother plant area and 1,740 sq. ft. of clone area. Mother plants would remain in the vegetative state solely for propagation. Cuttings would be sampled from the mother plants and rooted into a growing medium (e.g. oasis cubes) to produce clones. The clones would then be transferred to the vegetative nursery area, and after 2-3 weeks would be transplanted into one-gallon pots or similar. The juvenile plants would be irrigated using drip irrigation methods, and after approximately 2-4 weeks, they would be transplanted into their final location in the indoor cultivation area where they would continue their vegetative cycle and eventually flower. The applicants may also elect to purchase clones from off-site in any given year based on market fluctuations and available resources.

2.1.2. INDOOR CULTIVATION

Approximately 43,560 sq. ft. (1 acre) of indoor cultivation is proposed to occur in the 185' x 275' commercial structure (Building 1). The area proposed for indoor cultivation building development is paved and no new ground disturbance or clearing of vegetation is proposed. Ground disturbance of existing pavement will be required for building construction of footings, though the applicants intend to minimize ground disturbance as feasible.

Cultivation would occur within interior modular structures inside of Building 1. Interior modular structures would be assembled within the exterior of the structure and could be easily removed in the future while leaving Building 1 intact for a future use. These structures would likely be prefabricated (Norseman brand or similar), see Appendix D for conceptual designs and specifications.

Irrigation and fertigation of plants would occur using a hydroponic cultivation method using a Superponic system or similar. Indoor cultivation would use artificial light to produce up to five (5) flowering cycles per year, year-round. Lighting will occur at rate above 25 watts/square foot. The Cultivation Schedule in Appendix B details the cultivation activities associated with the operation for a typical year.

2.1.3. ANCILLARY DRYING AND PROCESSING

Plants that are ready for harvest would have their flowering branches removed and hung in the ancillary dry space within Building 1. Dry space is proposed to occur within several modular cleanroom type structures located within the steel building shell structure that would equal to approximately 10,000 sq. ft. Trimming of product cultivated onsite would occur in approximately 5,000 sf of designated ancillary processing space, within a modular clean room structure contained within the proposed cultivation facility. See Sheet C3 of the Site Maps for a conceptual design of Building 1; note that the proposed modular structures dimensions are subject to change based on availability and cost. See Appendix D for conceptual designs and specifications of the interior modular structures.

Applicable state cultivation licenses will be obtained once local authorization has been granted. All products will be tracked and weighed in accordance with County and State regulations, and all data will be entered into the California Cannabis Track-and-Trace (CCTT) METRC system.

2.2. COMMERCIAL PROCESSING (OFF-SITE PROCESSING)

The applicant is proposing to permit off-site commercial processing activities (Cannabis Support Facility) to dry, buck, trim, and/or package cannabis products brought in from offsite from other licensed farms. Approximately 2,434 sq. ft. of commercial off-site processing space is proposed in the existing secondary office building (Building 3). The 36.8'x130.25' building will be upgraded to meet Commercial Building Codes, if required by County and State agencies. Interior modifications to the building are also proposed (See Sheet C6 of the Site Plan).

Processing activities will include trimming and packaging. Dried flower product will be trimmed into manageable buds, either by hand or by a trimming machine. Packaging will also occur onsite within this same support facility in approximately 2,434 sq. ft. designated space just for this activity, or product may be taken offsite or transferred to the manufacturing area for further processing and packaging.

The trimming facility will not be open to the general public. The facility will operate year-round and operating hours will be approximately 8 a.m. to 5 p.m., Monday through Sunday. All employees working in the trimming area will have adequate access to personal safety equipment. Up to three (3) pickups/deliveries are anticipated daily.

A Processor License from CDFA will be obtained once local authorization has been granted. All product will be tracked and weighed in accordance with County and State regulations, and all data will be entered into the California Cannabis Track-and-Trace (CCTT) METRC system.

2.3. COMMERCIAL DISTRIBUTION

The applicant is proposing to permit distribution activities onsite as a Cannabis Support Facility. Approximately ±5,000 sq. ft. of distribution space is proposed in the existing office building (Building 2). The existing building may need to be modified to comply with County regulations. The distribution facility would operate year-round.

Specific distribution activities proposed include procuring cannabis from licensed cultivators or manufacturers for sale to licensed retailers, transporting cannabis products between licensed entities, coordinating batch testing of cannabis products, packaging and labeling of cannabis goods (including rolling pre-rolls), and storage of cannabis products.

North Wind Management, LLC will comply with all local and State regulations surrounding distribution operations, including:

- Hiring distribution employees for transportation that are exclusively over the age of 21;
- Insuring and registering vehicles for transportation of cannabis products in accordance with Bureau of Cannabis Control Regulations and the Vehicle Code;
- Keeping accurate records of shipping manifests onsite for a minimum of seven years;
- Entering all data into the CCTT system at regular intervals;
- Packaging cannabis products in manners that are child-resistant, do not advertise to children, and protect the product from spoiling or becoming contaminated; and
- Following all regulations surrounding cannabis product testing regulation.

Standard Operating Procedures for the distribution facility would be developed for agency review prior to implementation or construction. Additionally, applicable state licenses from the Department of Cannabis Control would be sought after approval from the County has been granted.

2.4. INFUSION

The applicant is proposing to permit 1,000 sq. ft. of infusion space within Building 3. Infusion activities would include the incorporation of cannabis concentrates or manufactured cannabis products into tinctures or pre-rolls. No food production is proposed; no commercial kitchen is required.

2.5. OFF-SITE PRODUCT STORAGE

The applicant is proposing 4,640 sq. ft. of off-site product storage within 29 8' x 20' modular structures. These structures would be climate-controlled and would operate to help offset the need for proper drying and storage of cannabis products. Product would be brought to the site from off-site farms and would be stored in secure storage containers. See Appendix D for conceptual designs of these structures.

2.6. MANUFACTURING (VOLATILE AND NON-VOLATILE)

The applicant is proposing to permit 960 sq. ft. of manufacturing, using both volatile and non-volatile solvent-based extraction methods. Approximately 480 sq. ft. of non-volatile manufacturing and approximately 480 sq. ft. of volatile manufacturing is proposed in the two (2) proposed 480 sq. ft. modular structures (Norseman C1D1 model or similar).

All manufacturing operations will follow California Building Codes, local regulations, and State Licensing requirements. The Manufacturing facility generally operates as follows:

1. *Holding and Staging*

Manufacturing begins with the transfer of product from distribution and has been logged and checked into the holding and staging area. Product will be prepared to begin pre-processing. Once product has completed all the manufacturing operations, the product will be returned to the holding and staging area to be transferred back to the distribution company.

2. *Pre-Processing*

Manufacturing pre-processing methods generally include preparation of product, cleaning and sterilizing equipment, grinding and staging for manufacturing activities, steam distillation for terpene extraction. Pre-processing is the stage where product is broken down, remaining stems are removed, and organized into manageable amounts to be processed.

3. *Primary Extraction*

Both nonvolatile manufacturing and volatile manufacturing are proposed. Nonvolatile Manufacturing utilizes nonvolatile solvents in the manufacturing process. Examples of nonvolatile solvents include carbon dioxide, water, or ethanol. Volatile Manufacturing is using a solvent that is or produces a flammable gas or vapor that, when present in the air in sufficient quantities can create explosive or ignitable mixtures. Examples of volatile solvents include butane, hexane, and propane. The applicant will

design interior control rooms within the modular structure where the primary extraction will take place in closed looped systems. Control rooms will be designed and built-in compliance with the California State Building Code and all appropriate local and State regulations.

Non-volatile manufacturing activities would include solventless water extraction, dry sieving, and ethanol. For ethanol-based manufacturing, the process involves the product/biomass mixed in an ethanol solution. The use of a centrifuge to agitate the mixture while the biomass is contained in a filter bag. A second option is for the plant material to be loaded into an extraction tank with cooled ethanol drawn into the tank via a vacuum. The ethanol is recirculated over the plant material to improve efficiency. After the extraction process the ethanol can be recovered by rotary evaporator system under vacuum and low heat to recover and reuse the ethanol.

Volatile manufacturing activities would include the use of butane extraction. The process involves the product/biomass packed in extraction tubes that are sealed and pressurized. The solvent is fed into tubes, permeates the biomass picking up cannabinoids and other substances. After the extraction is complete butane gas can be recovered. The extract is collected and placed in a vacuum oven to allow the butane to evaporate out of the solution.

Products developed in these processes will include crude ethanol, ethanol distillate, full melt hash, cooking hash, dry sieve material, BHO sauce, and diamonds derived from BHO sauce.

Storage of substances, including ethanol, butane, liquid nitrogen, and freon, would be located within a control room. No more than 200 gallons of any solvent would be kept onsite at any time. The applicants will enroll in the County's Certified Unified Program Agency (CUPA) program and a detailed Hazardous Materials Management Plan will be developed with details of non-volatile and volatile manufacturing activities, hazardous materials storage and control, and proper waste disposal.

4. *Post Processing*

Post processing occurs after the primary extraction and is intended to prepare cannabis oils for retail products. This can include removing unwanted solvents, further refinement of crude oils through distillation, or introduction of flavor. When post processing is complete product will be transferred back to the manufacturing holding and storage area.

Byproducts of manufacturing activities could include ethanol waste, spent trim material, finished hash material waste, plant material from dry sieve, and spent material from rosin press. Non-compostable byproducts would be hauled off-site by a licensed cannabis waste disposal service.

Seven employees would likely be dedicated to extraction activities. All extraction activities and facilities will be compliant with the California Building Code, California Department Public Health, the State Fire – Fire Marshall, and State and local requirements.

2.7. EMPLOYEE PLAN

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

2.7.1. EMPLOYEE SUMMARY

Up to forty (40) employees are proposed to run the proposed commercial cannabis activities, as follows.

- *Cultivation Activities:* Fifteen (15) employees.
 - *Lead Cultivators (1):* Responsibilities include but are not limited to maintaining plant health, inventory and tracking, personnel management, record keeping, budget, and liaison with State and County inspectors as needed. This is a full-time, year-round position.
 - *Cultivation Managers (1):* Responsible for business oversight and management. Responsibilities include but are not limited to inventory and tracking, personnel management, record keeping, budget, and liaison with State and County inspectors as needed. This is a full-time, year-round position.
 - *Laborers (Indoor) (13):* Provides cultivation, harvesting, nursery, and drying support. Responsibilities include but are not limited to plant propagation and transplant, soil management, irrigation, fertilization, pesticide management, and harvest activities. This is a part-time, year-round position.

- *Ancillary/Off-site Trimming:* Fifteen (15) employees.
 - *Trimming Manager (1):* Oversight and management of dried commercial cannabis and day-to-day trimming activities and employees. Responsibilities include but are not limited to tracking and weighing of trimmed product. This is a part-time to full-time, year-round position.
 - *Laborers (14):* Provides trimming support. This is a part-time, year-round to seasonal position.

- *Distribution:* three (3) employees.
 - *Distribution Manager (1):* Provides oversight and management of distribution activities. Responsible for oversight and management of distribution operations. Establishes procedures for maintaining high standards of operations to ensure quality products and safe working environment. This is a full-time, year-round position.
 - *Distribution Associates (1):* Assists in loading and unloading shipments, logging, weighing, and sorting of product, and other day to day operations. Tracks and inputs data associated with distribution activities. Responsibilities include compliance with the California Cannabis Track-and-Trace system. This is a full-time, seasonal to year-round position.
 - *Transport Drivers (1):* Responsibilities include safe and secure transportation distribution of commercial cannabis products to licensed cannabis entities. Must be over 21 years of age. This is a part time to full-time, year-round position.

- *Manufacturing:* Seven (7) employees.
 - *Manufacturing Manager (1):* Responsible for oversight of all manufacturing operations. Coordinates and collaborates with Extraction Technicians. Develops manufacturing plan and established procedures for maintaining high standards of operations to ensure that quality products and safe working environment. Responsible for oversight of manufacturing operations to be in full compliances with all State and County Agencies. This is a full-time, year-round position.
 - *Extraction Technicians (5):* Responsible for overall operation and safety of the cannabis extraction process including the maintenance and functionality of all equipment related to extraction, the input of all products and output of all finished goods in the processing area, any assistant or personnel needed in the processing operations. This is a part-time to full-time, year-round position.

- *Head of Maintenance (1)*: Responsible for day-to-day operations of maintenance and facilities onsite, including safe operation and proper upkeep of manufacturing and laboratory equipment. This is a full-time, year-round position.

2.7.2. EMPLOYEE TRAINING AND SAFETY

On-site cultivation, harvesting and drying will be performed by employees trained on each aspect of the procedure. Training will include but is not limited to cultivation/harvesting techniques, use of pruning tools, proper application/storage of pesticides and fertilizers. All cultivation staff will be provided with proper hand, eye, body, and respiratory Personal Protective Equipment (PPE). Access to the on-site cultivation and drying facilities will be limited to authorized and trained staff. All employees will be trained on proper safety procedures including fire safety, use of PPE, proper hand washing guidelines, and emergency protocol. Contact information for the local fire department, Cal Fire, Humboldt County Sheriff and Poison Control as well as the Agent in Charge will be posted at the employee restroom. Each employee is provided with a written copy of emergency procedures and contact information. The material safety data sheets are kept on site and accessible to employees.

2.7.3. TOILET AND HANDWASHING FACILITIES AND SEWAGE DISPOSAL PLAN

Employees will have access to a bathroom in the proposed indoor cultivation building and the existing buildings. At least one bathroom will have ADA accessibility in every building. The proposed bathrooms will either be tied into the existing onsite septic system if feasible, or a new septic system will be designed. Prior to construction, employees may either utilize the existing onsite restroom or portable toilets serviced by professionals may be brought to the site. Existing restrooms are available in the existing onsite facilities and will continue to be used for the project. Anti-bacterial Liquid Soap and paper hand towels will be made available. Restroom and handwashing units will be serviced at regular intervals by a licensed contractor. Work will occur at a distance no greater than 900 feet from the restroom facility.

2.7.4. ON-SITE HOUSING

No housing exists on the property. All employees will commute to the work site from off-site locations. Carpooling will be encouraged when possible.

2.7.5. TRAFFIC AND DAILY TRIPS

A maximum of 40 employees would be located onsite at any given time, equating to approximately 80 daily employee trips. A maximum of four (4) deliveries/pickups would be anticipated per day, equating to approximately eight (8) trips per day. Therefore, a maximum of 88 trips would be anticipated per day. The property historically supported over 100 workers and their associated daily trips from the mill and office operations. Therefore, traffic from the proposed project would be consistent with prior operations.

2.7.6. PARKING PLAN

The property historically supported over 100 workers associated with the mill. Ample parking spaces exist onsite, including ADA-compliant spaces. Sufficient parking exists for the proposed 40 employees.

2.1. SECURITY PLAN AND HOURS OF OPERATION

2.1.1. FACILITY SECURITY

Facility security will include a security office and perimeter fencing. There is existing fencing surrounding the entire property that will be monitored by onsite security personnel and alarm monitoring. Fencing consists of a standard 6-foot chain link fence. There are two access driveways to the parcel, all of which will have new gates installed and remain locked at night and if employees are not onsite.

Cultivation facilities (storage sheds, drying facility, existing and proposed facilities) will only be accessible through the locked gates. Security cameras and a video surveillance system will also be implemented for facility security and in accordance with DCC regulations for distributors and manufacturers. The recording system will have 24-hour monitoring and a minimum of 45-day archiving of video. Cameras will have a minimum resolution of 1280 x 720 pixels. The storage device and camera will be transmission control protocol (TCP) capable of being accessed through the internet. Limited access areas will have a door and lock that meets commercial grade standards.

All non-employee personnel will be required to check in at the security office, given a visitor badge, and will be escorted by a North Wind Management, LLC employee. Employees will be required to wear identification badges, including the employee’s name, position, and photograph. A security guard will be located onsite at all times.

The project proposes low-intensity exterior lighting to illuminate entrances and buildings, including several small motion-activated security lights. Security lighting will be cast downward to not cause a source of light pollution on surrounding properties.

2.1.2. LIGHT POLLUTION CONTROL PLAN

Indoor cultivation will be located inside a structure, allowing for no light to escape. Zero light shall escape all structures between sunset and sunrise. Any proposed security lighting will be downcast and not visible from neighboring properties.

3. ENVIRONMENT

3.1. WATER SOURCE, STORAGE, AND USE COMPLIANCE PLAN

3.1.1. WATER SOURCE

Water for proposed cannabis activities will be primarily sourced from the Humboldt Bay Municipal Water District (HBMWB), a will-serve letter to the project applicants is in progress. No groundwater or diversionary water sources are proposed for this project.

3.1.2. PROJECTED WATER USE

Water for the proposed cannabis activities is projected to be approximately 384,000 gallons annually (Table 2), per estimations from the Applicant. Variables such as environmental conditions and specific cannabis strains will have a slight effect on the exact amount of water use. Cutting edge water management technology, including a water reclamation hydroponic system, will be used to ensure efficient use and repurposing of water whenever possible.

Table 2. Estimated Monthly Water Usage (gallons)													
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Indoor Cultivation	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	300,000
Nursery	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
Manufacturing / Processing	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	24,000
													384,000

3.2. SITE DRAINAGE, RUNOFF, AND EROSION CONTROL

The applicant will enroll with the State Water Resources Control Board (SWRCB) for coverage under the Cannabis Cultivation General Order. A Site Management Plan (SMP) for existing site conditions is in the process of being developed; the SMP will detail erosion control and sediment capture measures, as well as road maintenance and runoff activities.

3.2.1. STORMWATER MANAGEMENT PLAN AND EROSION CONTROL

The proposed cultivation activities will take place on a paved historic mill site. All proposed buildings will be constructed on existing impervious surfaces; no new impervious surfaces are proposed. No erosion is present in the project area, as the entire site is paved.

3.3. WATERSHED AND HABITAT PROTECTION

A Biological Assessment was prepared for the proposed project by Timberland Resource Consultants. The proposed project will follow all recommendations outlined in the Biological Assessment. All proposed cultivation activities will be set back from wetlands and riparian features as described in the Biological Assessment. These setbacks should provide a suitable buffer between the cultivation operation and habitat. All light shall be attenuated so that it does not create a new source of light or glare that could adversely impact local wildlife. No grading or earthwork is proposed.

3.4. INVASIVE VEGETATIVE SPECIES CONTROL PLAN

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

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

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

More details regarding invasive species management can be found in the Biological Assessment (Timberland Resource Consultants, June 2021).

3.5. MATERIALS MANAGEMENT PLAN

All cannabis activities shall be performed by employees trained on each aspect of the procedure, including cultivation and harvesting techniques, the use of pruning tools, proper application/storage of pesticides/ and fertilizers, compliant weighting and tracking of all products throughout all processes, and safe storage and use of hazardous materials. All cultivation and processing staff will be provided with proper hand, eye, body and respiratory Personal Protective Equipment (PPE), particularly for manufacturing activities.

Access to the onsite activity facilities will be limited to authorized employees and agency personnel. No portion of the site would be generally accessible to the public.

Mixing of fertilizers in small storage reservoir tanks will be solely conducted inside the proposed indoor buildings in a designated area where the mix cannot contaminate other water sources. For young plants, the mix is applied via watering wand and mature plants are fertigated at agronomic rates by drip emitters or hand watering methods. The application of any agricultural chemical products will be conducted according to the manufacturer's recommendation.

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

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

All hazardous waste will be stored within secondary containment. Additionally, a log will be kept in order to keep the volume of hazardous waste accounted for. Fertilizers and pesticides will be stored in a separate location from petroleum products. The aforementioned products will be located within secondary containment in a storage shed. Before unused products are stored, an employee will take inventory on the volumes and products.

No rodenticides will be used on site.

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

3.6. SOILS MANAGEMENT PLAN

The applicant is proposing to plant all cultivation within indoor buildings using a hydroponic operation, therefore little to no soil will be used. If soil is used, the applicant will account for and keep records of annual and seasonal volumes of soil imported and exported on and off site. Any purchased soils will be reamended for use the following year. During the wet season, any soil piles will be located in a flat area outside of riparian setbacks and winterized, likely with a tarp underneath the pile and straw wattles located around the pile to prevent leachate from entering surface waters. Potential spent soils will be properly disposed of off-site at an appropriate facility.

3.7. WASTE MANAGEMENT PLAN

3.7.1. REFUSE MANAGEMENT PLAN

Solid waste will be stored in garbage cans within or adjacent to the indoor cultivation building. Waste will be transported to an appropriate facility weekly or as needed. Trash and recycling from cannabis operations, including empty soil or fertilizer bags, liquid fertilizer bottles, cultivation supplies, etc., will be taken to the nearest waste management facility as needed.

3.7.2. WASTEWATER AND BYPRODUCT MANAGEMENT PLAN

Cultivation and manufacturing facilities are proposed to function as closed-loop systems as much as possible. Indoor cultivation will be conducted with nutrient-enriched irrigation systems and re-used until the concentration of built-up salts or nutrients exceed desirable levels. At this point, wastewater from indoor cultivation will be processed through a water reclamation system for repurposing. Any excess wastewater would be discharged into an appropriate collection tank and regularly serviced or disposed of in the existing onsite wastewater system (pending approval from the Department of Environmental Health).

To minimize wastewater in both the indoor cultivation areas, the applicants will install and use drip-emitter irrigation systems in tandem with state of the art hydroponic technologies capable of sensing individual plant needs. This will conserve water and minimize excessive wastewater from cultivation activities.

Wastewater from manufacturing and testing activities will need to be similarly routed as spent indoor wastewater, either through the existing septic system, a new proposed wastewater system and septic tank, or properly disposed of by a licensed wastewater treatment facility. Byproducts of manufacturing activities could include ethanol waste, spent trim material, finished hash material waste, plant material from dry sieve, and spent material from rosin press. Non-compostable byproducts would be hauled off-site by a licensed cannabis waste disposal service.

See Section 2.6.3 for sewage disposal.

3.7.3. CULTIVATION WASTE MANAGEMENT PLAN

Organic waste, including cannabis plant branches and leaves, plant waste, and non-hazardous wood waste, will be chipped and composted onsite located near the indoor building.

3.8. HAZARDOUS WASTE STATEMENT

Refer to the Phase 1 Environmental Site Assessment prepared by GHD (April 2020).

3.9. ENERGY PLAN

The Applicants currently have an existing PG&E service and an associated substation onsite. This service historically provided power to the Sierra Pacific Industries mill operation and it is expected that the existing onsite service will continue to provide power for this parcel. A service upgrade is also currently being obtained from PG&E and construction expected to coincide with the approval of the project and obtaining the necessary building permits. North Wind Management, LLC intends to conserve power where possible with the use of LED lighting and updated, energy-saving equipment. All power used from PG&E for cultivation activities shall be sourced from renewable energy, such as the RCEA PowerPlus Plan or similar. No generators are proposed for this project.

OPERATIONS MANUAL
NORTH WIND MANAGEMENT, LLC

APPENDIX A: SITE PLANS

APPENDIX C: REFERENCES

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APPENDIX D: CONCEPTUAL MODULAR STRUCTURE DESIGNS
