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AIR QUALITY AND GREENHOUSE GAS EMISSION ANALYSIS

PROPOSED CANNABIS CAMPUS

SHASTA COUNTY APNs 006-020-056 & 057

2116 ASHBY ROAD, SHASTA LAKE, CA 96019

December 19, 2019

CONTENTS

1.0	Introduction	2
1.1	Project Location	2
1.2	Project Description	2
2.0	Air Quality	5
2.1	Air Quality Setting	5
2.2	Criteria Air Pollutants & Toxic Air Contaminants	5
2.3	Ambient Air Quality	7
2.4	Regulatory Framework	9
3.0	Air Quality Emissions Impact Assessment	11
3.1	Air Quality Impact Analysis – Construction Phase	12
3.2	Air Quality Impact Analysis – Operations Phase	15
3.3	Exposure of Sensitive Receptors to Toxic Air Contaminants	16
3.4	Odors	17
4.0	Greenhouse Gas Emissions	20
4.1	Sources of Greenhouse Gas Emissions	21
4.2	Regulatory Framework	22
4.3	Greenhouse Gas Emissions Impact Assessment	25
5.0	References	28

LIST OF TABLES

Table 2-1. Criteria Air Pollutants – Summary of Common Sources and Effects	6
Table 2-2. Summary of Ambient Air Quality Data	8
Table 2-3. Attainment Status of Criteria Pollutants in the Shasta County Portion of the NSVAB	8
Table 3-1. SCAQMD Thresholds of Significance – Pounds per Day	11
Table 3-2. Construction-Related Emissions	13
Table 4-1. Greenhouse Gases	21
Table 4-2. Construction-Related Greenhouse Gas Emissions	26
Table 4-3. Operational Greenhouse Gas Emissions	27

ATTACHMENTS

Attachment A – CalEEMod Output File for Air Quality Emissions

Attachment B – CalEEMod Output File for Greenhouse Gas Emissions

1.0 INTRODUCTION

This report documents the results of an assessment of both air quality and greenhouse gas emissions (GHG) completed for a proposed “Cannabis Campus” (Project) in the City of Shasta Lake, CA (City). This assessment was prepared using methodologies and assumptions recommended in the rules and regulations of the Shasta County Air Quality Management District. Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and GHG emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

1.1 PROJECT LOCATION

The Project site is composed of two Light Industrial-zoned parcels, Shasta County APNs 006-020-056 & 057 (Project Property), near the geographic center of the City of Shasta Lake in the south-central portion of Shasta County, CA. The Project Property is approximately 12.86 acres and located west and directly adjacent to Ashby Road, approximately 1.5 miles west of Interstate 5. Sierra Pacific Industries (SPI) industrial sawmill operation is located immediately north of the Project Property, and vacant industrial-zoned parcels are located south and west of to the Project Property. A residential neighborhood is located directly east of and across Ashby Road from the Project Property. The Project Property is characterized by vacant, wooded, undeveloped land.

1.2 PROJECT DESCRIPTION

The proposed Project includes the construction of a 24-foot wide paved access road, twelve 5,040 ft² mixed-light cannabis cultivation buildings/facilities, a 5,040 ft² cannabis processing building/facility, a 5,040 ft² cannabis distribution building/facility, and a 20,000 ft² non-volatile extraction/manufacturing building/facility. The proposed mixed-light cannabis cultivation buildings/facilities will be composed wood framed structures on concrete slabs with metal and polycarbonate roofs and walls. The proposed processing and distribution buildings/facilities will be composed of wood framed buildings on concrete slabs with insulated metal walls and roofs. The proposed non-volatile extraction/manufacturing building/facility will be composed of a steel framed structure with insulated metal walls and roof on a concrete slab.

The Project Property and proposed buildings/facilities would be accessed via the proposed 24-foot wide paved access road off of Ashby Road. The proposed access road would completely bisect the Project Property, connecting the industrial parcels north and west of the Project Property to Ashby Road.

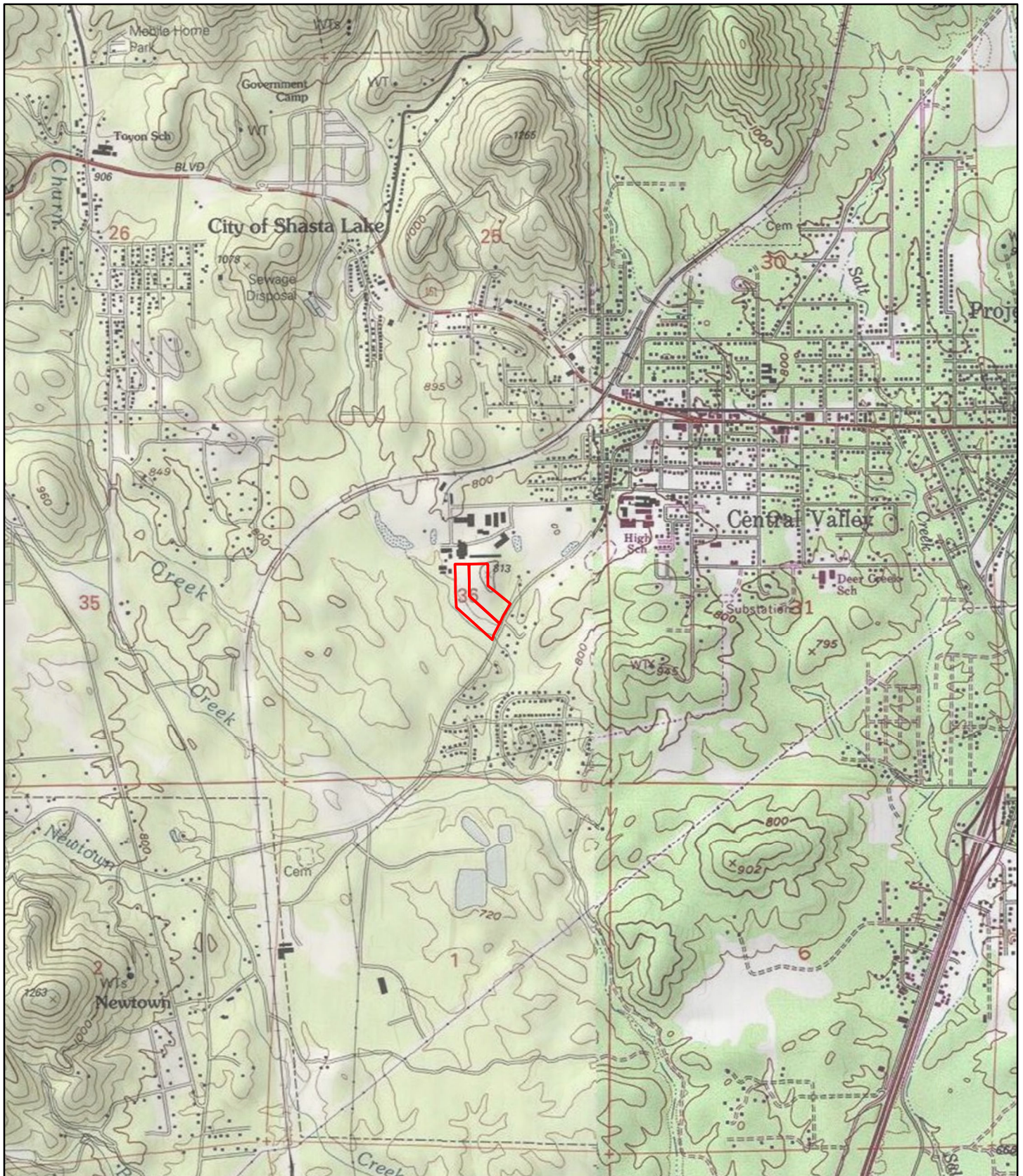
Development of the proposed Project will occur in at least four phases:

Phase 1 – Construction of the proposed access road (Year 1)

Phase 2 – Construction of the proposed cultivation, processing, and distribution buildings/facilities on Shasta County APN 006-020-056 (Years 1 and/or 2)

Phase 3 – Construction of the proposed cultivation buildings/facilities on Shasta County APN 006-020-057 (Years 2, 3, and/or 4)

Phase 4 – Construction of the proposed non-volatile extraction/manufacturing building/facility (Year 3 or later)



Site Boundary

0 0.25 0.5 Miles

USGS Map

Ashby Rd Parcels
Shasta Lake, CA

APNs: 006-020-056, 006-020-057



Wiemeyer Ecological Sciences
4000 Montgomery Drive, Suite L-5
Santa Rosa, CA 95405

Parcel boundary
provided by
Shasta County
Map date: 6/2018

2.0 AIR QUALITY

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the Northern Sacramento Valley Air Basin (NSVAB), which encompasses the Project site, pursuant to the regulatory authority of the Shasta County Air Quality Management District (SCAQMD).

2.1 AIR QUALITY SETTING

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. Shasta Lake lies in the Northern Sacramento Valley Air Basin (NSVAB), which includes Sutter, Yuba, Colusa, Butte, Glenn, Tehama, and Shasta counties. The NSVAB is bounded on the north and west by the Coastal Mountain Range and on the east by the southern end of the Cascade Mountain Range and the northern end of the Sierra Nevada. These mountain ranges reach heights in excess of 6,000 feet above mean sea level, with individual peaks rising much higher. The mountains form a substantial physical barrier to locally created pollution as well as to pollution transported northward on prevailing winds from the Sacramento metropolitan area (SVAQEEP 2015).

The environmental conditions of Shasta County are conducive to potentially adverse air quality conditions. The basin area traps pollutants between two mountain ranges to the east and the west. This problem is exacerbated by a temperature inversion layer that traps air at lower levels below an overlying layer of warmer air. Prevailing winds in the area are generally from the south and southwest. Sea breezes flow over the San Francisco Bay Area and into the Sacramento Valley, transporting pollutants from the large urban areas. Growth and urbanization in Shasta County have also contributed to an increase in emissions.

2.2 CRITERIA AIR POLLUTANTS & TOXIC AIR CONTAMINANTS

Criteria air pollutants are defined as those pollutants for which federal and state governments and/or agencies have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O₃), coarse particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO₂), and sulfur dioxide (SO₂) are considered to be local pollutants because they tend to accumulate in the air locally. Particulate matter is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 2-1 (on next page).

Table 2-1. Criteria Air Pollutants - Summary of Common Sources and Effects		
Pollutant	Major Man-Made Sources	Human Health & Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO ₂	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O ₃	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (NO _x) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM ₁₀ & PM _{2.5}	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO ₂	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: CAPCOA 2013

Toxic air contaminants (TACs) are another group of air pollutants of concern, that are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

2.3 AMBIENT AIR QUALITY

Ambient air quality at the Project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains over 60 monitoring stations throughout California. O_3 , PM_{10} and $PM_{2.5}$ are the pollutant species most potently affecting the Project region. The Shasta Lake – 13791 Lake Boulevard air quality monitoring station, located approximately 1.5 miles northwest of the Project site, monitors ambient concentrations of O_3 . The Shasta Lake – 4066 La Mesa Avenue air quality monitoring station, located approximately 0.5 miles east-northeast of the Project site, monitors ambient concentrations of PM_{10} . The nearest air quality monitoring station to the Project site that monitors concentrations of $PM_{2.5}$ is the Redding – Health Department station, located approximately 6.5 miles south of the Project Property. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered “generally” representative of ambient concentrations in the Project area. Table 2-2 (on next page) summarizes data published by the California Air Resources Board for O_3 , $PM_{2.5}$, PM_{10} , since 2015 for each year that the monitoring data is provided.

The U.S. Environment Protection Agency (EPA) and CARB designate air basins or portions of air basins and counties as being in “attainment” or “nonattainment” for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O_3 , $PM_{2.5}$, PM_{10} , and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3 , $PM_{2.5}$, PM_{10} are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the Shasta County portion of the NSVAB is included in Table 2-3 (on next page).

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as nonattainment for the state O_3 standard (CARB 2017a).

Table 2-2. Summary of Ambient Air Quality Data			
Pollutant Standards	2015	2016	2017
O₃ (Measured at the Shasta Lake – 13791 Lake Boulevard Air Quality Monitoring Station)			
Max 1-hour concentration (ppm)	0.091	0.093	0.096
Max 8-hour concentration (ppm) (state/federal)	0.083 / 0.082	0.082 / 0.082	0.089 / 0.088
Number of days above 1-hour standard (state/federal)	0 / 0	0 / 0	1 / 0
Number of days above 8-hour standard (state/federal)	17 / 12	14 / 13	13 / 13
PM₁₀ (Measured at the Shasta Lake – 406 La Mesa Avenue Air Quality Monitoring Station)			
Max 24-hour concentration (µg/m ³) (state/federal)	84.4 / 87.2	32.2 / 33.2	83.6 / 87.6
Number of days above 24-hour standard (state/federal)	6.1 / 0	0 / 0	* / 0
PM_{2.5} (Measured at the Redding – Health Department Air Quality Monitoring Station)			
Max 24-hour concentration (µg/m ³) (state/federal)	64.6 / 64.6	12.6 / 12.6	67.3 / 67.3
Number of days above federal 24-hour standard	6.0	0.0	6.1

µg/m³ = micrograms per cubic meter; ppm = parts per million; * = insufficient data available

Source: CARB 2018

Table 2-3. Attainment Status of Criteria Pollutants in the Shasta County Portion of the NSVAB		
Pollutant	State Designation	Federal Designation
O ₃	Nonattainment	Attainment
PM ₁₀	Attainment	Unclassified
PM _{2.5}	Attainment	Unclassified/Attainment
CO	Unclassified	Unclassified/Attainment
NO ₂	Attainment	Unclassified/Attainment
SO ₂	Attainment	Unclassified/Attainment

Source: CARB 2017a

2.4 REGULATORY FRAMEWORK

Clean Air Act (Federal)

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the EPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide is an air pollutant covered by the CAA; however, no NAAQS have been established for carbon dioxide.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those “sensitive receptors” most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The EPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 2-3 (on previous page) lists the federal attainment status of the Shasta County portion of the NSVAB for the criteria pollutants.

California Air Resources Board (State)

CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California’s State Implementation Plan (SIP), for which it works closely with the federal government and local air districts.

Shasta County Air Quality Management District (Local)

The SCAQMD is designated by law to adopt and enforce regulations to achieve and maintain ambient air quality standards. The SCAQMD, along with other air districts in the NSVAB, has committed to jointly prepare and implement the *NSVAB Air Quality Attainment Plan* for the purpose of achieving and maintaining healthful air quality throughout the air basin. In

addition, the SCAQMD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs, and it regulates agricultural burning. Other responsibilities include monitoring air quality, preparing clean air plans, and responding to citizen complaints concerning air quality.

All projects in Shasta County are subject to applicable SCAQMD rules and regulations in effect at the time of construction. Descriptions of specific rules applicable to construction resulting from implementation of the Proposed Project may include, but are not limited to:

- SCAQMD Rule 2-1A, Authorities to Construct/Permits to Operate, allows any person to use construction equipment for construction activities, and must obtain a permit to operate prior to installation activities.
- SCAQMD Rule 3-2, Specific Air Contaminants, controls the amount of air contaminants allowed to be discharged into the atmosphere.
- Architectural coatings and solvents used at the Project shall be compliant with SCAQMD Rule 3-31, Architectural Coatings.
- SCAQMD Rule 3-16, Fugitive, Indirect, or Non-traditional Sources, controls the emission of fugitive dust during earth-moving, construction, demolition, bulk storage, and conditions resulting in wind erosion.

3.0 AIR QUALITY EMISSIONS IMPACT ASSESSMENT

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would:

- 1) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- 2) Conflict with or obstruct implementation of any applicable air quality plan.
- 3) Expose sensitive receptors to substantial pollutant concentrations.
- 4) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

SCAQMD significance thresholds are used to determine air quality impacts in this analysis. These thresholds are consistent with New Source Review Rule 2-1 adopted by the SCAQMD Board in 1993, as required by the California Clean Air Act. The thresholds of significance are summarized in Table 3-1 (below).

Table 3-1. Shasta County Air Quality Management District Thresholds of Significance – Pounds per Day			
Threshold	NO _x	ROG	PM ₁₀
Level A Thresholds	25	25	80
Level B Thresholds	137	137	137

NO_x = nitrogen oxide (ozone precursor), ROG = reactive organic gas (ozone precursor)

The SCAQMD recommends that projects apply Standard Mitigation Measures (SMM) and appropriate Best Available Mitigation Measures (BAMM) when a project exceeds Level A thresholds and SMM, BAMM, and special BAMM when a project exceeds Level B thresholds. Projects that cannot mitigate emissions to levels below the Level B thresholds are considered significant. Based on these standards, the effects of the proposed Project have been categorized as either a “less than significant impact” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less-than-significant level through the application of mitigation, it is categorized as a significant and unavoidable impact.

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project’s individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project’s individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Air quality impacts were assessed in accordance with methodologies recommended by CARB and the SCAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were primarily calculated using CalEEMod model defaults for Shasta County. Operational air pollutant emissions were based on the Project site plans and automobile trip rates and distances calculated by the traffic engineering firm, T. Kear Transportation Planning & Management, Inc. (2019).

3.1 AIR QUALITY IMPACT ANALYSIS – CONSTRUCTION PHASE

Construction-generated emissions are temporary and short term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the proposed Project: operation of construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive particulate matter emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation.

Construction-generated emissions associated with the proposed Project were calculated using the CARB- approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Attachment A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis. Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 3-2 (on next page). Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 3-2. Construction-Related Emissions					
Construction Year	Pollutant (pounds per day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Construction in Year One	77.32	33.04	32.5	8.72	4.95
Construction in Year Two	66.78	38.08	27.1	9.00	5.19
Construction in Year Three	2.11	16.29	16.4	1.29	0.84
Construction in Year Four	123.8	15.01	16.1	1.20	0.75
<i>Level A Significance Threshold</i>	25	25	<i>None</i>	80	<i>None</i>
Exceed Level A Threshold	Yes	Yes	No	No	No
<i>Level B Significance Threshold</i>	137	137	<i>None</i>	137	<i>None</i>
Exceed Level B Threshold?	No	No	No	No	No

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.

As shown in Table 3-2, daily emissions associated with the construction of the proposed Project would exceed the Level A significance threshold for ROG and NO_x emissions. No pollutants would surpass the Level B significance thresholds during the assumed construction period. The SCAQMD recommends that projects apply SMM and appropriate BMM when a project exceeds Level A thresholds in order to be considered less than significant. To comply with SCAQMD recommendations, Mitigation Measure AQ-1 is recommended, which includes various dust control measures to reduce fugitive PM₁₀ and PM_{2.5}, such as regular watering of disturbed areas, providing track-out devices that reduce soil from trucks being 'tracked' onto adjacent roadways, covering stockpiles, and limiting on-site vehicle speeds. Mitigation Measure AQ-1 also contains measures to reduce O₃ precursor emissions from construction equipment. Implementation of Mitigation Measure AQ-1 would reduce impacts resulting from construction-generated emissions associated with Project construction.

Recommended Mitigation

AQ-1: Prior to issuance of a grading permit, the Project applicant shall submit a grading plan for review and approval by the City of Shasta Lake Planning Division. The following specifications shall be included on the permit to reduce short-term air quality impacts attributable to the on-site and off-site construction activities:

- During all construction activities, all architectural coatings applied shall contain a low content of volatile organic compounds (VOC) (i.e., 100 grams/liter) as required by the California Green Building Code.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. Equipment maintenance records shall be kept on-site and made available upon request by the City of Shasta Lake or Shasta County AQMD.
- All material excavated, stockpiled, or graded shall be sufficiently watered to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day.
- All unpaved areas (including unpaved roads) with vehicle traffic shall be watered periodically or have dust palliatives applied for stabilization of dust emissions.
- All on-site vehicles shall be limited to a speed of 15 miles per hour on unpaved roads.
- All land clearing, grading, earth-moving, or excavation activities on the Project site shall be suspended when sustained winds are expected to exceed 20 miles per hour.
- All portions of the development site which have been stripped of vegetation by construction activities shall be stabilized in accordance with the approved stormwater pollution prevention plan.
- All trucks hauling dirt, sand, soil, or loose material shall be covered or shall maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of California Vehicle Code Section 23114. This provision will be enforced by local law enforcement agencies.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent a public nuisance.
- Prior to final occupancy, the applicant shall re-establish ground cover on the construction site through seeding and watering.
- Off-road construction equipment shall not be left idling for periods longer than 5 minutes when not in use.
- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Maximize to the extent feasible, the use of diesel construction equipment meeting current CARB certification standards for off-road heavy-duty diesel engines.
- Registration in the CARB DOORS program (www.arb.ca.gov/msprog/ordiesel/ordiesel.htm) and meeting all applicable standards for replacement and/or retrofit.
- All portable equipment, including generators and air compressors rated over 50 brake horse power, shall be registered in the Portable Equipment Registration Program (<https://ww2.arb.ca.gov/our-work/programs/portable-equipment-registration-program-perp>), or permitted through the SCAQMD as a stationary source.

Implementation of Mitigation Measure AQ-1 would be required as part of any grading permit issued for the Project. As shown in Table 3-2, Project emissions do not exceed the SCAQMD Level B Threshold; thus, impacts from construction-generated air pollutants would be less than significant with the implementation of Mitigation Measure AQ-1.

3.2 AIR QUALITY IMPACT ANALYSIS – OPERATIONS PHASE

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM₁₀, PM_{2.5}, CO, and SO₂ as well as O₃ precursors such as ROG and NO_x. Project-generated increases in emissions would be predominantly associated with motor vehicle use. Long-term operational emissions attributable to the Project are identified in Table 3-2 (below) and compared to the regional operational significance thresholds promulgated by the SCAQMD.

As shown in Table 3-2, daily emissions associated with Project operations should not exceed the Level A (or Level B) significance thresholds during operations. Therefore, no mitigation measures are recommended during the Operations phase of the proposed Project. As shown in Table 3-2, Project emissions do not exceed the SCAQMD Level A Threshold; thus, impacts from Project operations would be less than significant.

Table 3-2. Operational-Related Emissions					
Emission Source	Pollutant (pounds per day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Area	2.51	<0.1	<0.1	<0.1	<0.1
Energy	0.05	0.44	0.37	0.03	0.03
Mobile	0.41	3.87	5.00	1.28	0.36
Total	2.98	4.31	5.38	1.32	0.39
<i>Level A Significance Threshold</i>	25	25	None	80	None
Exceed Level A Threshold	No	No	No	No	No
<i>Level B Significance Threshold</i>	137	137	None	137	None
Exceed Level B Threshold?	No	No	No	No	No

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs

3.3 EXPOSURE OF SENSITIVE RECEPTORS TO TOXIC AIR CONTAMINANTS

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

Construction

Construction-related activities would result in temporary, short-term Project-generated emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); paving; application of architectural coatings; and other miscellaneous activities. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Accordingly, DPM is the focus of this discussion.

Based on the emission modeling conducted the maximum construction-related annual emissions of PM_{2.5} exhaust, considered a surrogate for DPM, would be 1.634 pounds per day (see Attachment A) during construction activity (PM_{2.5} exhaust is considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., PM_{2.5}), according to CARB. Most PM_{2.5} derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) Furthermore, even during the most intense construction, emissions of DPM would be generated from different locations on the Project site, rather than a single location, because different types of construction activities (e.g., site preparation, grading, building construction) would not occur at the same place at the same time.

The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-, 30-, or 9-year exposure period; further, such assessments should be limited to the period/duration of activities associated with the proposed Project. Consequently, an important consideration is the fact that construction of the proposed Project is not anticipated to last 9 consecutive years, the minimum duration of exposure from which

to calculate health risk, and that on a day-to-day basis construction activity generally spans eight hours as opposed to throughout the entire day.

Another important consideration is the proximity of nearby sensitive receptors. Studies show that DPM disperses rapidly (e.g., according to CARB (2005) DPM concentrations decrease by 70 percent at 500 feet from the source), and receptors must be in close proximity to emission sources (over a substantial span of time) in order to be exposed to concentrations of concern. The nearest sensitive residential receptors around the Project site are more than 50 feet from the eastern boundary of the Project site. As previously described, emissions of DPM would be generated from different locations on the Project site, rather than a single location, because different types of construction activities would not occur at the same place at the same time. The center of the Project site is approximately 650 feet from the nearest potentially sensitive receptor.

Given the locations of potential receptors relative to potential DPM emission sources and the temporary nature of construction activities, the concentrations and durations of any TAC exposure that might occur as a result of Project construction would be less than significant.

Operation

The proposed Project involves the construction of a “Cannabis Campus”, where cannabis plants will be cultivated and cannabis plant material will be processed and extracted using non-volatile means. The proposed Project will not include new permanent stationary or mobile sources of emissions, and therefore, by its very nature, will not generate quantifiable air toxic emissions from Project operations.

3.4 ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person’s reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person may be pleasant to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. An industrial sawmill operation is located directly adjacent to and north of the Project Property. This industrial sawmill operation generates odors, the smell of fresh cut pine which is a subjectively pleasant odor, that can be detected throughout the Project Property whenever the mill is operating. Additionally, there are stormwater and process water catchment ponds associated with the industrial sawmill operation, that generate subjectively offensive odors that can be detected throughout the Project Property are various times.

The proposed Project is a commercial cannabis cultivation, processing, and manufacturing operation, collectively referred to as a Cannabis Campus. Commercial cannabis operations can generate objectionable odors, particularly when cannabis plants are mature/flowering in the cultivation area(s) or when cannabis plant material is being processed (drying, curing, trimming, and grading) after harvest. As such, the proposed Project could be a source of obnoxious odors during operation, resulting in the proposed Project being considered a potentially significant odor-related impact. Implementation of following mitigation measures (Mitigation Measure AQ-2) would reduce impacts resulting from operation of the proposed Project to a less-than-significant level. No significant odor impacts are anticipated from the proposed Project due to the generous setbacks from public roads and neighboring residences/outdoor activity areas (potentially sensitive odor receptors). Additionally, odors generated from the neighboring industrial sawmill operation should mask any residual odors emanating from the proposed Project.

AQ-2: Prior to conducting any cannabis cultivation, processing, or manufacturing activities, carbon filters/air scrubbers shall be installed on the exhaust of the ventilation systems of the cultivation, processing, and manufacturing buildings of the proposed Project.

- Monthly, the Project Operator shall inspect the air filtration and odor mitigation equipment of the ventilation systems of the buildings of the proposed Project.
- The Project Operator shall replace these carbon filters every quarter, or more frequently if cannabis related odors can be detected outside of the buildings of the

proposed Project.

- The Project Operator shall log and maintain accurate records of repairs and replacements to the ventilation and odor mitigation systems of the proposed Project, and shall retain those records for at least three years.
- Annually, the Project Operator shall review all documentation pertaining to the performance of the air filtration and odor mitigation equipment of the ventilation systems, to determine if the risk of nuisance odors or other air contaminants are within acceptable tolerances, or can be mitigated further by implementing new best management practices or advanced mechanical systems.

4.0 GREENHOUSE GAS EMISSIONS

Certain gases in the earth's atmosphere, classified as Greenhouse Gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (IPCC 2014).

Table 4-1 (on next page) describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect. Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps over 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂ (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e), which weight each gas by its global warming potential (GWP). Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO₂ is emitted into the atmosphere than is

sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO₂ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere (IPCC 2013).

Table 4-1. Greenhouse Gases	
Greenhouse Gas	Description
CO ₂	Carbon dioxide is a colorless, odorless gas. CO ₂ is emitted in a number of ways, both naturally and through human activities. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO ₂ emissions. The atmospheric lifetime of CO ₂ is variable because it is so readily exchanged in the atmosphere. ¹
CH ₄	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH ₄ to the atmosphere. Natural sources of CH ₄ include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH ₄ is about 12 years. ²
N ₂ O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N ₂ O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N ₂ O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. ³

Sources: ¹EPA 2016a; ²EPA 2016b; ³EPA 2016c

4.1 SOURCES OF GREENHOUSE GAS EMISSIONS

In June 2017, CARB released the 2017 edition of the California GHG inventory covering calendar year 2015 emissions. In 2015, California emitted 440.4 million gross metric tons of CO₂e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2015, accounting for approximately 37 percent of total GHG emissions in the state. This sector was followed by the industrial sector (21 percent) and the electric power sector (including both in-state and out-of-state sources) (19 percent) (CARB 2017b).

Emissions of CO₂ are by-products of fossil fuel combustion. CH₄, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N₂O is also largely attributable to agricultural practices and soil management. Carbon dioxide sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution (CO₂ dissolving into the water), respectively, two of the most common processes for removing carbon dioxide from the atmosphere.

The City of Shasta Lake has developed a full inventory of GHG emissions from all sectors within the City, including building energy (electricity and natural gas), water (water demand and wastewater), solid waste, transportation, off-road vehicles, recreation, and stationary sources (industrial). In 2008, the community's total baseline emissions included 215,988 metric tons of CO₂e emissions. Energy production and consumption generated the largest portion of emissions at 82,943 metric tons of CO₂e (38 percent of the total emissions). Stationary sources, such as Sierra Pacific Industries and Knauf Insulation, generated the second highest amount of emissions in the City at 72,038 metric tons of CO₂e (33 percent of the total emissions), followed by transportation emissions at 48,106 metric tons of CO₂e (22 percent of the total emissions). The water and off-road/recreation sectors comprise the remaining 7 percent of the emissions inventory (SCAQMD 2012).

4.2 REGULATORY FRAMEWORK

State

Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the executive order established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

While dated, this executive order remains relevant because a more recent California Appellate Court decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056, examined whether it should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. While the California Supreme Court ruled that the San Diego Association of Governments did not abuse its discretion by declining "to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal, the decision also recognized that the goal of a 40 percent reduction in 1990 GHG levels by 2030 is "widely acknowledged" as a "necessary interim target to ensure that California meets its longer-range goal of reducing greenhouse gas emissions 80 percent below 1990 levels by the year 2050.

Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed Assembly Bill 32 (Health and Safety Code §38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020

(representing a 25 percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15 percent from current levels for local governments and notes that successful implementation relies on local governments' land use planning and urban growth decisions.

Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which was re-approved by CARB on August 24, 2011, that outlines measures to meet the 2020 GHG reduction goals. To meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. The Scoping Plan recommends measures for further study and possible State implementation, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO₂e (about 191 million U.S. tons) from the transportation, energy, agriculture, and forestry sectors and other sources could be achieved should the State implement all of the measures in the Scoping Plan.

The Scoping Plan is required by AB 32 to be updated at least every five years. The first update to the AB 32 Scoping Plan was approved on May 22, 2014 by CARB. The 2017 Scoping Plan Update was adopted on December 14, 2017. The Scoping Plan Update addresses the 2030 target established by Senate Bill 32 (SB 32) as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include: increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

Executive Order B-30-15

On April 20, 2015 Governor Brown signed Executive Order B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG

emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Senate Bill X1-2 of 2011

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently-owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California.

Senate Bill 350 of 2015, and Senate Bill 100 of 2018

In October 2015, SB 350 was signed by Governor Brown, which requires retail sellers and publicly-owned utilities to procure 50 percent of their electricity from renewable resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 RPS.

Local

Shasta Regional Climate Action Plan

In 2010, the SCAQMD initiated the regional climate action planning (RCAP) process. The primary objectives of the RCAP process are to contribute to the State's climate protection efforts and to provide CEQA review streamlining benefits for development projects in the region's four jurisdictions: the City of Anderson, the City of Redding, the City of Shasta Lake, and the unincorporated areas of Shasta County. To facilitate these objectives, the SCAQMD worked with the four jurisdictions to prepare community-specific, independent climate action plans that contain GHG emission inventories and forecasts, emission reduction measures, and implementation and monitoring programs. The RCAP document serves as a collection of the individual climate action plans and demonstrates the region's commitment to the State's GHG reduction efforts (Shasta County 2012).

Shasta Regional Transportation Agency Regional Transportation Plan / Sustainable Communities Strategy

In 2018, the Shasta Regional Transportation Agency (SRTA) adopted the 2018 Regional Transportation Plan/ Sustainable Communities Strategy (2018 RTP/SCS). The 2018 RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow intelligently and sustainably. The 2018 RTP/SCS is a long-range visioning plan to encourage and promote the safe and efficient management, operation, and development of a regional intermodal transportation system that, when linked with appropriate land use planning, will serve the mobility needs of goods and people. The RTP/SCS is required to meet the region's

GHG emissions reduction targets, established by CARB for the years 2020 and 2035. Currently, SRTA is tasked by CARB to achieve a 4 percent reduction in mobile-source GHG emissions compared to 2005 vehicle emissions in 2020 and 2035.

4.3 GREENHOUSE GAS EMISSIONS IMPACT ASSESSMENT

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to greenhouse gas emissions if it would:

- 1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- 2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The SCAQMD does not promulgate thresholds for GHG emissions; therefore, the analysis will rely on a multi-tiered approach to analyzing GHG. First, Project GHG emissions will be compared with the thresholds established in Tehama County. As with Shasta County and the Project site, Tehama County is located within the NSVAB and therefore mass emission thresholds of significance developed in that county are appropriate. Furthermore, the California Air Pollution Control Officers Association (CAPCOA) has provided guidance for determining the significance of GHG emissions generated from land use development projects. CAPCOA also considers projects that generate more than 900 metric tons of GHG to be significant. Additionally, the Project will be compared for consistency with the GHG inventory prepared in the Shasta Regional Climate Action Plan, as well as compliance with the Plan's mandatory measures for new development. Lastly, Project GHG emissions will also be compared for consistency with the goals and assumptions of the SRTA 2018 RTP/SCS, which establishes an overall GHG target for the Project region consistent with both the target date of AB 32 (2020) and the post-2020 GHG reduction goals of SB 32.

GHG impacts were assessed in accordance with methodologies recommended by CARB and the SCAQMD. Where quantification was required, GHG emissions were modeled using CalEEMod, version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated GHG emissions were primarily calculated using CalEEMod model defaults for Shasta County. Operational air pollutant emissions were based on the Project site plans and automobile trip rates and distances calculated by the traffic engineering firm, T. Kear Transportation Planning & Management, Inc. (2019). The proposed Project will result in indirect GHG emissions associated with the generation of electricity. CO₂ intensity factors associated with Pacific Gas & Electric's electricity production was used as a comparable substitute for the City of Shasta Lake Electric Utility.

Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 4-2 (below) illustrates the specific construction-generated GHG emissions that would result from construction of the Project. As shown in Table 4-2, Project construction would result in the generation of approximately 650 metric tons of CO₂e over the course of construction. Generation of these GHG emissions would cease once construction is complete. The amortized construction emissions have been added to the annual average operation emissions.

Table 4-2. Construction-Related Greenhouse Gas Emissions	
Emissions Source	CO ₂ e (Metric Tons/Year)
Construction in Year One	209
Construction in Year Two	110
Construction in Year Three	264
Construction in Year Four	67
Project Construction Total	650

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs

Operations

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle and electrical use. Long-term operational GHG emissions attributable to the Project are identified in Table 4-3 (on next page) and compared to the Tehama County Air Pollution Control District's numeric bright-line threshold of 900 metric tons of CO₂e annually. While significance thresholds promulgated in Tehama County are not binding in the City of Shasta Lake, they are helpful for comparison purposes. As with Shasta County and the Project site, Tehama County is located within the NSVAB and therefore mass emission thresholds of significance developed in that county are appropriate due to the similarities in regional geography as well as land use patterns. Additionally, the CAPCOA has provided guidance for determining the significance of GHG emissions generated from land use development projects. CAPCOA also considers projects that generate more than 900 metric tons of GHG to be significant.

Table 4-3. Operational Greenhouse Gas Emissions	
Emissions Source	CO₂e (Metric Tons/ Year)
Construction Emissions (amortized over the 30-year life of the Project)	22
Area Source Emissions	<1
Energy Source Emissions	336
Mobile Source Emissions	316
Waste Emissions	43
Water Emissions	62
Total Emissions	780
<i>TCAPCD & CAPCOA Threshold</i>	<i>900</i>
Exceed TCAPCD/CAPCOA Threshold?	No

As shown in Table 4-3, operation-generated emissions would not exceed the numeric bright-line threshold of 900 metric tons of CO₂e annually. This threshold, established by both the Tehama County Air Pollution Control District and CAPCOA, was developed based on substantial evidence that it represents a quantitative level of GHG emissions, compliance with which means that the environmental impact of the GHG emissions would not be considerable under CEQA.

5.0 REFERENCES

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ATTACHMENT A

CalEEMod Output Files – Criteria Air Pollutants

Ashby Cannabis Campus - Shasta County, Winter

Ashby Cannabis Campus

Shasta County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	90.56	1000sqft	2.08	90,560.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E used as comperable substitute for City of Shasta Lake Electric Utility.

Land Use - Development footprint = 7.3 acres

Construction Phase - Cultivation buildings can each be built in two weeks.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Ashby Cannabis Campus - Shasta County, Winter

Off-road Equipment - All paved surfaces will be composed of concrete

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Demolition - No demolitions needed (vacant undeveloped land).

Trips and VMT -

Road Dust - Speed limit of 15 mph throughout the Project Property

Landscape Equipment - Typically at least one snow day per year.

Energy Use -

Land Use Change -

Sequestration -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - LED lights will be used throughout the Project.

Waste Mitigation -

Architectural Coating - One-third of Cultivation Buildings will be cover with transparent polycarbonate to allow light to pass into the buildings. No Architectural coatings will be applied to the transparent polycarbonate sections of the Cultivation Buildings (1/3 less exterior area for architectural coating). Actual surface area of Distribution, Processing, and Cultivation Buildings for application of architectural coatings is 4,536 sq. ft. (8 buildings on 056 and 6 buildings on 057).

Ashby Cannabis Campus - Shasta County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	45,280.00	30,184.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	45,280.00	30,184.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	45,280.00	26,666.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	135,840.00	36,288.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	135,840.00	27,216.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	135,840.00	80,000.00
tblConstructionPhase	PhaseEndDate	4/11/2023	10/27/2020
tblConstructionPhase	PhaseEndDate	3/14/2023	7/7/2020
tblConstructionPhase	PhaseEndDate	5/11/2021	9/29/2020
tblConstructionPhase	PhaseEndDate	6/23/2020	5/12/2021
tblConstructionPhase	PhaseEndDate	3/29/2022	8/4/2021
tblConstructionPhase	PhaseEndDate	5/9/2023	9/1/2021
tblConstructionPhase	PhaseEndDate	2/14/2023	3/3/2023
tblConstructionPhase	PhaseEndDate	6/6/2023	5/12/2023
tblConstructionPhase	PhaseStartDate	3/15/2023	9/30/2020
tblConstructionPhase	PhaseStartDate	2/15/2023	6/10/2020
tblConstructionPhase	PhaseStartDate	6/24/2020	6/10/2020
tblConstructionPhase	PhaseStartDate	5/27/2020	4/15/2021
tblConstructionPhase	PhaseStartDate	4/12/2023	8/5/2021
tblConstructionPhase	PhaseStartDate	3/30/2022	4/18/2022
tblConstructionPhase	PhaseStartDate	5/10/2023	4/17/2023
tblLandscapeEquipment	NumberSnowDays	0	1
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	200.00

2.0 Emissions Summary

Ashby Cannabis Campus - Shasta County, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	77.3165	33.0396	31.6610	0.0616	7.1732	1.6315	8.7206	3.5264	1.5394	4.9500	0.0000	5,905.646 7	5,905.646 7	1.1209	0.0000	5,933.669 1
2021	66.7773	38.0822	26.6523	0.0551	7.2574	1.7419	8.9993	3.5566	1.6340	5.1905	0.0000	5,244.7111	5,244.7111	1.1505	0.0000	5,273.473 1
2022	2.1100	16.2884	16.1021	0.0331	0.5773	0.7096	1.2869	0.1552	0.6800	0.8352	0.0000	3,115.3643	3,115.3643	0.4898	0.0000	3,127.609 9
2023	123.8312	15.0096	15.7839	0.0329	0.5773	0.6183	1.1957	0.1552	0.5924	0.7476	0.0000	3,092.849 1	3,092.849 1	0.4691	0.0000	3,104.575 3
Maximum	123.8312	38.0822	31.6610	0.0616	7.2574	1.7419	8.9993	3.5566	1.6340	5.1905	0.0000	5,905.646 7	5,905.646 7	1.1505	0.0000	5,933.669 1

Ashby Cannabis Campus - Shasta County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	77.3165	33.0396	31.6610	0.0616	7.1732	1.6315	8.7206	3.5264	1.5394	4.9500	0.0000	5,905.6467	5,905.6467	1.1209	0.0000	5,933.6691
2021	66.7773	38.0822	26.6523	0.0551	7.2574	1.7419	8.9993	3.5566	1.6340	5.1905	0.0000	5,244.7111	5,244.7111	1.1505	0.0000	5,273.4731
2022	2.1100	16.2884	16.1021	0.0331	0.5773	0.7096	1.2869	0.1552	0.6800	0.8352	0.0000	3,115.3643	3,115.3643	0.4898	0.0000	3,127.6099
2023	123.8312	15.0096	15.7839	0.0329	0.5773	0.6183	1.1957	0.1552	0.5924	0.7476	0.0000	3,092.8491	3,092.8491	0.4691	0.0000	3,104.5753
Maximum	123.8312	38.0822	31.6610	0.0616	7.2574	1.7419	8.9993	3.5566	1.6340	5.1905	0.0000	5,905.6467	5,905.6467	1.1505	0.0000	5,933.6691

[illegible]

Ashby Cannabis Campus - Shasta County, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5138	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Energy	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
Mobile	0.4136	3.8699	5.0025	0.0184	1.2611	0.0217	1.2828	0.3382	0.0205	0.3587		1,867.3578	1,867.3578	0.1140		1,870.2085
Total	2.9758	4.3098	5.3812	0.0210	1.2611	0.0552	1.3163	0.3382	0.0540	0.3922		2,395.1213	2,395.1213	0.1242	9.6800e-003	2,401.1094

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3690	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Energy	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
Mobile	0.4136	3.8699	5.0025	0.0184	1.2611	0.0217	1.2828	0.3382	0.0205	0.3587		1,867.3578	1,867.3578	0.1140		1,870.2085
Total	2.8309	4.3098	5.3812	0.0210	1.2611	0.0552	1.3163	0.3382	0.0540	0.3922		2,395.1213	2,395.1213	0.1242	9.6800e-003	2,401.1094

Ashby Cannabis Campus - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/15/2020	4/28/2020	5	3	Phase 1
2	Grading 056	Grading	4/29/2020	5/26/2020	5	6	Phase 1/2
3	Building Construction 056	Building Construction	6/10/2020	9/29/2020	5	220	Phase 1/2
4	Paving	Paving	6/10/2020	7/7/2020	5	10	Phase 1/2
5	Architectural Coating 056	Architectural Coating	9/30/2020	10/27/2020	5	10	Phase 1/2
6	Grading 057	Grading	4/15/2021	5/12/2021	5	6	Phase 3/4
7	Building Construction 057 Cultivation	Building Construction	5/12/2021	8/4/2021	5	220	Phase 3/4
8	Architectural Coating 057 Cultivation	Architectural Coating	8/5/2021	9/1/2021	5	10	Phase 3/4
9	Building Construction 057 Manufacturing	Building Construction	4/18/2022	3/3/2023	5	220	Phase 4
10	Architectural Coating 057 Manufacturing	Architectural Coating	4/17/2023	5/12/2023	5	10	Phase 4

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 36,288; Non-Residential Outdoor: 30,184; Striped Parking Area: 0
(Architectural Coating – sqft)

OffRoad Equipment

Ashby Cannabis Campus - Shasta County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating 056	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction 056	Cranes	1	8.00	231	0.29
Building Construction 056	Forklifts	2	7.00	89	0.20
Building Construction 056	Generator Sets	1	8.00	84	0.74
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading 056	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction 056	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading 056	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading 056	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction 056	Welders	3	8.00	46	0.45
Architectural Coating 057 Cultivation	Air Compressors	1	6.00	78	0.48
Architectural Coating 057 Manufacturing	Air Compressors	1	6.00	78	0.48
Building Construction 057 Cultivation	Cranes	1	8.00	231	0.29
Building Construction 057 Manufacturing	Cranes	1	8.00	231	0.29
Building Construction 057 Cultivation	Forklifts	2	7.00	89	0.20
Building Construction 057 Manufacturing	Forklifts	2	7.00	89	0.20
Building Construction 057 Cultivation	Generator Sets	1	8.00	84	0.74
Building Construction 057 Manufacturing	Generator Sets	1	8.00	84	0.74
Grading 056	Graders	1	8.00	187	0.41
Grading 057	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

Ashby Cannabis Campus - Shasta County, Winter

Paving	Rollers	2	8.00	80	0.38
Grading 057	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction 057 Cultivation	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction 057 Manufacturing	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading 057	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction 057 Cultivation	Welders	3	8.00	46	0.45
Building Construction 057 Manufacturing	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading 056	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading 056	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 056	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 056	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 056	1	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 057 Cultivation	1	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 057 Manufacturing	1	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 057 Cultivation	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 057 Manufacturing	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading 057	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Ashby Cannabis Campus - Shasta County, Winter

3.2 Site Preparation - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149		2,372.906 2	2,372.906 2	0.7675		2,392.092 4
Total	1.6521	19.9196	11.2678	0.0245	1.5908	0.7771	2.3678	0.1718	0.7149	0.8867		2,372.906 2	2,372.906 2	0.7675		2,392.092 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0438	0.3599	9.5000e-004	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		95.0613	95.0613	3.1900e-003		95.1409
Total	0.0499	0.0438	0.3599	9.5000e-004	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		95.0613	95.0613	3.1900e-003		95.1409

Ashby Cannabis Campus - Shasta County, Winter

3.2 Site Preparation - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149	0.0000	2,372.906 2	2,372.906 2	0.7675		2,392.092 4
Total	1.6521	19.9196	11.2678	0.0245	1.5908	0.7771	2.3678	0.1718	0.7149	0.8867	0.0000	2,372.906 2	2,372.906 2	0.7675		2,392.092 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0438	0.3599	9.5000e-004	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		95.0613	95.0613	3.1900e-003		95.1409
Total	0.0499	0.0438	0.3599	9.5000e-004	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		95.0613	95.0613	3.1900e-003		95.1409

Ashby Cannabis Campus - Shasta County, Winter

3.3 Grading 056 - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0014	32.6741	14.0672	0.0291		1.5451	1.5451		1.4215	1.4215		2,823.7486	2,823.7486	0.9133		2,846.5800
Total	3.0014	32.6741	14.0672	0.0291	6.5523	1.5451	8.0975	3.3675	1.4215	4.7890		2,823.7486	2,823.7486	0.9133		2,846.5800

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1621	0.1424	1.1696	3.1000e-003	0.6209	2.2700e-003	0.6231	0.1589	2.0900e-003	0.1610		308.9492	308.9492	0.0104		309.2079
Total	0.1621	0.1424	1.1696	3.1000e-003	0.6209	2.2700e-003	0.6231	0.1589	2.0900e-003	0.1610		308.9492	308.9492	0.0104		309.2079

Ashby Cannabis Campus - Shasta County, Winter

3.3 Grading 056 - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0014	32.6741	14.0672	0.0291		1.5451	1.5451		1.4215	1.4215	0.0000	2,823.7486	2,823.7486	0.9133		2,846.5800
Total	3.0014	32.6741	14.0672	0.0291	6.5523	1.5451	8.0975	3.3675	1.4215	4.7890	0.0000	2,823.7486	2,823.7486	0.9133		2,846.5800

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1621	0.1424	1.1696	3.1000e-003	0.6209	2.2700e-003	0.6231	0.1589	2.0900e-003	0.1610		308.9492	308.9492	0.0104		309.2079
Total	0.1621	0.1424	1.1696	3.1000e-003	0.6209	2.2700e-003	0.6231	0.1589	2.0900e-003	0.1610		308.9492	308.9492	0.0104		309.2079

Ashby Cannabis Campus - Shasta County, Winter

3.4 Building Construction 056 - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.8877	2,288.8877	0.4646		2,300.5014
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.8877	2,288.8877	0.4646		2,300.5014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1280	3.5204	0.8627	7.9100e-003	0.3148	0.0188	0.3336	0.0851	0.0180	0.1031		826.2189	826.2189	0.0784		828.1794
Worker	0.4737	0.4162	3.4188	9.0700e-003	1.8148	6.6300e-003	1.8214	0.4646	6.1100e-003	0.4707		903.0822	903.0822	0.0303		903.8386
Total	0.6017	3.9366	4.2815	0.0170	2.1296	0.0255	2.1550	0.5497	0.0241	0.5738		1,729.3011	1,729.3011	0.1087		1,732.0180

Ashby Cannabis Campus - Shasta County, Winter

3.4 Building Construction 056 - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.8877	2,288.8877	0.4646		2,300.5014
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.8877	2,288.8877	0.4646		2,300.5014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1280	3.5204	0.8627	7.9100e-003	0.3148	0.0188	0.3336	0.0851	0.0180	0.1031		826.2189	826.2189	0.0784		828.1794
Worker	0.4737	0.4162	3.4188	9.0700e-003	1.8148	6.6300e-003	1.8214	0.4646	6.1100e-003	0.4707		903.0822	903.0822	0.0303		903.8386
Total	0.6017	3.9366	4.2815	0.0170	2.1296	0.0255	2.1550	0.5497	0.0241	0.5738		1,729.3011	1,729.3011	0.1087		1,732.0180

Ashby Cannabis Campus - Shasta County, Winter

3.5 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.2180	1,709.2180	0.5417		1,722.7605

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0935	0.0822	0.6748	1.7900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		178.2399	178.2399	5.9700e-003		178.3892
Total	0.0935	0.0822	0.6748	1.7900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		178.2399	178.2399	5.9700e-003		178.3892

Ashby Cannabis Campus - Shasta County, Winter

3.5 Paving - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.2180	1,709.2180	0.5417		1,722.7605

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0935	0.0822	0.6748	1.7900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		178.2399	178.2399	5.9700e-003		178.3892
Total	0.0935	0.0822	0.6748	1.7900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		178.2399	178.2399	5.9700e-003		178.3892

Ashby Cannabis Campus - Shasta County, Winter

3.6 Architectural Coating 056 - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	77.0244					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	77.2666	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0438	0.3599	9.5000e-004	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		95.0613	95.0613	3.1900e-003		95.1409
Total	0.0499	0.0438	0.3599	9.5000e-004	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		95.0613	95.0613	3.1900e-003		95.1409

Ashby Cannabis Campus - Shasta County, Winter

3.6 Architectural Coating 056 - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	77.0244					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	77.2666	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0438	0.3599	9.5000e-004	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		95.0613	95.0613	3.1900e-003		95.1409
Total	0.0499	0.0438	0.3599	9.5000e-004	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		95.0613	95.0613	3.1900e-003		95.1409

Ashby Cannabis Campus - Shasta County, Winter

3.7 Grading 057 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100		1,995.6114	1,995.6114	0.6454		2,011.7470

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0577	0.0485	0.4058	1.1500e-003	0.1277	8.4000e-004	0.1286	0.0339	7.8000e-004	0.0347		114.7046	114.7046	3.5100e-003		114.7923
Total	0.0577	0.0485	0.4058	1.1500e-003	0.1277	8.4000e-004	0.1286	0.0339	7.8000e-004	0.0347		114.7046	114.7046	3.5100e-003		114.7923

Ashby Cannabis Campus - Shasta County, Winter

3.7 Grading 057 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0577	0.0485	0.4058	1.1500e-003	0.1277	8.4000e-004	0.1286	0.0339	7.8000e-004	0.0347		114.7046	114.7046	3.5100e-003		114.7923
Total	0.0577	0.0485	0.4058	1.1500e-003	0.1277	8.4000e-004	0.1286	0.0339	7.8000e-004	0.0347		114.7046	114.7046	3.5100e-003		114.7923

Ashby Cannabis Campus - Shasta County, Winter

3.8 Building Construction 057 Cultivation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0537	1.6082	0.3812	3.9200e-003	0.0920	4.8700e-003	0.0968	0.0265	4.6500e-003	0.0311		409.5822	409.5822	0.0379		410.5296
Worker	0.2193	0.1845	1.5420	4.3800e-003	0.4854	3.2100e-003	0.4886	0.1287	2.9600e-003	0.1317		435.8774	435.8774	0.0133		436.2107
Total	0.2730	1.7927	1.9232	8.3000e-003	0.5773	8.0800e-003	0.5854	0.1552	7.6100e-003	0.1628		845.4596	845.4596	0.0512		846.7403

Ashby Cannabis Campus - Shasta County, Winter

3.8 Building Construction 057 Cultivation - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0537	1.6082	0.3812	3.9200e-003	0.0920	4.8700e-003	0.0968	0.0265	4.6500e-003	0.0311		409.5822	409.5822	0.0379		410.5296
Worker	0.2193	0.1845	1.5420	4.3800e-003	0.4854	3.2100e-003	0.4886	0.1287	2.9600e-003	0.1317		435.8774	435.8774	0.0133		436.2107
Total	0.2730	1.7927	1.9232	8.3000e-003	0.5773	8.0800e-003	0.5854	0.1552	7.6100e-003	0.1628		845.4596	845.4596	0.0512		846.7403

Ashby Cannabis Campus - Shasta County, Winter

3.9 Architectural Coating 057 Cultivation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	66.5123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	66.7312	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0462	0.0388	0.3246	9.2000e-004	0.1022	6.8000e-004	0.1029	0.0271	6.2000e-004	0.0277		91.7637	91.7637	2.8100e-003		91.8338
Total	0.0462	0.0388	0.3246	9.2000e-004	0.1022	6.8000e-004	0.1029	0.0271	6.2000e-004	0.0277		91.7637	91.7637	2.8100e-003		91.8338

Ashby Cannabis Campus - Shasta County, Winter

3.9 Architectural Coating 057 Cultivation - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	66.5123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	66.7312	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0462	0.0388	0.3246	9.2000e-004	0.1022	6.8000e-004	0.1029	0.0271	6.2000e-004	0.0277		91.7637	91.7637	2.8100e-003		91.8338
Total	0.0462	0.0388	0.3246	9.2000e-004	0.1022	6.8000e-004	0.1029	0.0271	6.2000e-004	0.0277		91.7637	91.7637	2.8100e-003		91.8338

Ashby Cannabis Campus - Shasta County, Winter

3.10 Building Construction 057 Manufacturing - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
Total	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0500	1.5201	0.3517	3.8800e-003	0.0920	4.2500e-003	0.0962	0.0265	4.0700e-003	0.0306		405.9892	405.9892	0.0364		406.8986
Worker	0.2045	0.1642	1.3971	4.2200e-003	0.4854	3.1200e-003	0.4885	0.1287	2.8700e-003	0.1316		420.0938	420.0938	0.0118		420.3883
Total	0.2545	1.6843	1.7488	8.1000e-003	0.5773	7.3700e-003	0.5847	0.1552	6.9400e-003	0.1621		826.0830	826.0830	0.0482		827.2869

Ashby Cannabis Campus - Shasta County, Winter

3.10 Building Construction 057 Manufacturing - 2022**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
Total	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0500	1.5201	0.3517	3.8800e-003	0.0920	4.2500e-003	0.0962	0.0265	4.0700e-003	0.0306		405.9892	405.9892	0.0364		406.8986
Worker	0.2045	0.1642	1.3971	4.2200e-003	0.4854	3.1200e-003	0.4885	0.1287	2.8700e-003	0.1316		420.0938	420.0938	0.0118		420.3883
Total	0.2545	1.6843	1.7488	8.1000e-003	0.5773	7.3700e-003	0.5847	0.1552	6.9400e-003	0.1621		826.0830	826.0830	0.0482		827.2869

Ashby Cannabis Campus - Shasta County, Winter

3.10 Building Construction 057 Manufacturing - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0376	1.2388	0.2966	3.8200e-003	0.0920	1.6600e-003	0.0936	0.0265	1.5900e-003	0.0281		399.0732	399.0732	0.0256		399.7138
Worker	0.1916	0.1468	1.2728	4.0600e-003	0.4854	3.0400e-003	0.4884	0.1287	2.8000e-003	0.1315		404.2526	404.2526	0.0104		404.5136
Total	0.2293	1.3857	1.5694	7.8800e-003	0.5773	4.7000e-003	0.5820	0.1552	4.3900e-003	0.1596		803.3258	803.3258	0.0361		804.2274

Ashby Cannabis Campus - Shasta County, Winter

3.10 Building Construction 057 Manufacturing - 2023**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0376	1.2388	0.2966	3.8200e-003	0.0920	1.6600e-003	0.0936	0.0265	1.5900e-003	0.0281		399.0732	399.0732	0.0256		399.7138
Worker	0.1916	0.1468	1.2728	4.0600e-003	0.4854	3.0400e-003	0.4884	0.1287	2.8000e-003	0.1315		404.2526	404.2526	0.0104		404.5136
Total	0.2293	1.3857	1.5694	7.8800e-003	0.5773	4.7000e-003	0.5820	0.1552	4.3900e-003	0.1596		803.3258	803.3258	0.0361		804.2274

Ashby Cannabis Campus - Shasta County, Winter

3.11 Architectural Coating 057 Manufacturing - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	123.5992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	123.7909	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0309	0.2680	8.5000e-004	0.1022	6.4000e-004	0.1028	0.0271	5.9000e-004	0.0277		85.1058	85.1058	2.2000e-003		85.1608
Total	0.0403	0.0309	0.2680	8.5000e-004	0.1022	6.4000e-004	0.1028	0.0271	5.9000e-004	0.0277		85.1058	85.1058	2.2000e-003		85.1608

Ashby Cannabis Campus - Shasta County, Winter

3.11 Architectural Coating 057 Manufacturing - 2023**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	123.5992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	123.7909	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0309	0.2680	8.5000e-004	0.1022	6.4000e-004	0.1028	0.0271	5.9000e-004	0.0277		85.1058	85.1058	2.2000e-003		85.1608
Total	0.0403	0.0309	0.2680	8.5000e-004	0.1022	6.4000e-004	0.1028	0.0271	5.9000e-004	0.0277		85.1058	85.1058	2.2000e-003		85.1608

4.0 Operational Detail - Mobile

Ashby Cannabis Campus - Shasta County, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4136	3.8699	5.0025	0.0184	1.2611	0.0217	1.2828	0.3382	0.0205	0.3587		1,867.3578	1,867.3578	0.1140		1,870.2085
Unmitigated	0.4136	3.8699	5.0025	0.0184	1.2611	0.0217	1.2828	0.3382	0.0205	0.3587		1,867.3578	1,867.3578	0.1140		1,870.2085

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	152.14	152.14	152.14	587,791	587,791
Total	152.14	152.14	152.14	587,791	587,791

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No Rail	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.514295	0.033300	0.182894	0.110648	0.035005	0.006975	0.013104	0.092427	0.001351	0.001296	0.005878	0.001311	0.001516

Ashby Cannabis Campus - Shasta County, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
NaturalGas Unmitigated	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798

Ashby Cannabis Campus - Shasta County, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	4485.82	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
Total		0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	4.48582	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
Total		0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798

6.0 Area Detail**6.1 Mitigation Measures Area**

Ashby Cannabis Campus - Shasta County, Winter

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3690	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Unmitigated	2.5138	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211

Ashby Cannabis Campus - Shasta County, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.7000e-004	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Total	2.5138	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7931					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.7000e-004	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Total	2.3690	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211

7.0 Water Detail

Ashby Cannabis Campus - Shasta County, Winter

7.1 Mitigation Measures Water

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Ashby Cannabis Campus - Shasta County, Summer

Ashby Cannabis Campus

Shasta County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	90.56	1000sqft	2.08	90,560.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E used as comperable substitute for City of Shasta Lake Electric Utility.

Land Use - Development footprint = 7.3 acres

Construction Phase - Cultivation buildings can each be built in two weeks.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Ashby Cannabis Campus - Shasta County, Summer

Off-road Equipment - All paved surfaces will be composed of concrete

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Demolition - No demolitions needed (vacant undeveloped land).

Trips and VMT -

Road Dust - Speed limit of 15 mph throughout the Project Property

Landscape Equipment - Typically at least one snow day per year.

Energy Use -

Land Use Change -

Sequestration -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - LED lights will be used throughout the Project.

Waste Mitigation -

Architectural Coating - One-third of Cultivation Buildings will be cover with transparent polycarbonate to allow light to pass into the buildings. No Architectural coatings will be applied to the transparent polycarbonate sections of the Cultivation Buildings (1/3 less exterior area for architectural coating). Actual surface area of Distribution, Processing, and Cultivation Buildings for application of architectural coatings is 4,536 sq. ft. (8 buildings on 056 and 6 buildings on 057).

Ashby Cannabis Campus - Shasta County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	45,280.00	30,184.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	45,280.00	30,184.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	45,280.00	26,666.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	135,840.00	36,288.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	135,840.00	27,216.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	135,840.00	80,000.00
tblConstructionPhase	PhaseEndDate	4/11/2023	10/27/2020
tblConstructionPhase	PhaseEndDate	3/14/2023	7/7/2020
tblConstructionPhase	PhaseEndDate	5/11/2021	9/29/2020
tblConstructionPhase	PhaseEndDate	6/23/2020	5/12/2021
tblConstructionPhase	PhaseEndDate	3/29/2022	8/4/2021
tblConstructionPhase	PhaseEndDate	5/9/2023	9/1/2021
tblConstructionPhase	PhaseEndDate	2/14/2023	3/3/2023
tblConstructionPhase	PhaseEndDate	6/6/2023	5/12/2023
tblConstructionPhase	PhaseStartDate	3/15/2023	9/30/2020
tblConstructionPhase	PhaseStartDate	2/15/2023	6/10/2020
tblConstructionPhase	PhaseStartDate	6/24/2020	6/10/2020
tblConstructionPhase	PhaseStartDate	5/27/2020	4/15/2021
tblConstructionPhase	PhaseStartDate	4/12/2023	8/5/2021
tblConstructionPhase	PhaseStartDate	3/30/2022	4/18/2022
tblConstructionPhase	PhaseStartDate	5/10/2023	4/17/2023
tblLandscapeEquipment	NumberSnowDays	0	1
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	200.00

2.0 Emissions Summary

Ashby Cannabis Campus - Shasta County, Summer

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	77.3202	32.9035	32.5066	0.0636	7.1732	1.6310	8.7206	3.5264	1.5389	4.9500	0.0000	6,102.974 9	6,102.974 9	1.1188	0.0000	6,130.945 4
2021	66.7806	38.0249	27.0667	0.0561	7.2574	1.7417	8.9991	3.5566	1.6338	5.1903	0.0000	5,344.866 2	5,344.866 2	1.1493	0.0000	5,373.598 4
2022	2.1206	16.2461	16.3940	0.0339	0.5773	0.7094	1.2867	0.1552	0.6798	0.8350	0.0000	3,195.343 8	3,195.343 8	0.4878	0.0000	3,207.538 5
2023	123.8337	14.9772	16.0652	0.0337	0.5773	0.6183	1.1956	0.1552	0.5924	0.7476	0.0000	3,170.158 8	3,170.158 8	0.4680	0.0000	3,181.859 5
Maximum	123.8337	38.0249	32.5066	0.0636	7.2574	1.7417	8.9991	3.5566	1.6338	5.1903	0.0000	6,102.974 9	6,102.974 9	1.1493	0.0000	6,130.945 4

Ashby Cannabis Campus - Shasta County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	77.3202	32.9035	32.5066	0.0636	7.1732	1.6310	8.7206	3.5264	1.5389	4.9500	0.0000	6,102.9749	6,102.9749	1.1188	0.0000	6,130.9454
2021	66.7806	38.0249	27.0667	0.0561	7.2574	1.7417	8.9991	3.5566	1.6338	5.1903	0.0000	5,344.8662	5,344.8662	1.1493	0.0000	5,373.5984
2022	2.1206	16.2461	16.3940	0.0339	0.5773	0.7094	1.2867	0.1552	0.6798	0.8350	0.0000	3,195.3438	3,195.3438	0.4878	0.0000	3,207.5385
2023	123.8337	14.9772	16.0652	0.0337	0.5773	0.6183	1.1956	0.1552	0.5924	0.7476	0.0000	3,170.1588	3,170.1588	0.4680	0.0000	3,181.8595
Maximum	123.8337	38.0249	32.5066	0.0636	7.2574	1.7417	8.9991	3.5566	1.6338	5.1903	0.0000	6,102.9749	6,102.9749	1.1493	0.0000	6,130.9454

[illegible]

Ashby Cannabis Campus - Shasta County, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5138	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Energy	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
Mobile	0.5279	3.7048	5.5791	0.0201	1.2611	0.0214	1.2825	0.3382	0.0202	0.3584		2,044.6806	2,044.6806	0.1102		2,047.4354
Total	3.0901	4.1447	5.9578	0.0228	1.2611	0.0548	1.3159	0.3382	0.0536	0.3918		2,572.4441	2,572.4441	0.1204	9.6800e-003	2,578.3364

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3690	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Energy	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
Mobile	0.5279	3.7048	5.5791	0.0201	1.2611	0.0214	1.2825	0.3382	0.0202	0.3584		2,044.6806	2,044.6806	0.1102		2,047.4354
Total	2.9452	4.1447	5.9578	0.0228	1.2611	0.0548	1.3159	0.3382	0.0536	0.3918		2,572.4441	2,572.4441	0.1204	9.6800e-003	2,578.3364

Ashby Cannabis Campus - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/15/2020	4/28/2020	5	3	Phase 1
2	Grading 056	Grading	4/29/2020	5/26/2020	5	6	Phase 1/2
3	Building Construction 056	Building Construction	6/10/2020	9/29/2020	5	220	Phase 1/2
4	Paving	Paving	6/10/2020	7/7/2020	5	10	Phase 1/2
5	Architectural Coating 056	Architectural Coating	9/30/2020	10/27/2020	5	10	Phase 1/2
6	Grading 057	Grading	4/15/2021	5/12/2021	5	6	Phase 3/4
7	Building Construction 057 Cultivation	Building Construction	5/12/2021	8/4/2021	5	220	Phase 3/4
8	Architectural Coating 057 Cultivation	Architectural Coating	8/5/2021	9/1/2021	5	10	Phase 3/4
9	Building Construction 057 Manufacturing	Building Construction	4/18/2022	3/3/2023	5	220	Phase 4
10	Architectural Coating 057 Manufacturing	Architectural Coating	4/17/2023	5/12/2023	5	10	Phase 4

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 36,288; Non-Residential Outdoor: 30,184; Striped Parking Area: 0
(Architectural Coating – sqft)

OffRoad Equipment

Ashby Cannabis Campus - Shasta County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating 056	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction 056	Cranes	1	8.00	231	0.29
Building Construction 056	Forklifts	2	7.00	89	0.20
Building Construction 056	Generator Sets	1	8.00	84	0.74
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading 056	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction 056	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading 056	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading 056	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction 056	Welders	3	8.00	46	0.45
Architectural Coating 057 Cultivation	Air Compressors	1	6.00	78	0.48
Architectural Coating 057 Manufacturing	Air Compressors	1	6.00	78	0.48
Building Construction 057 Cultivation	Cranes	1	8.00	231	0.29
Building Construction 057 Manufacturing	Cranes	1	8.00	231	0.29
Building Construction 057 Cultivation	Forklifts	2	7.00	89	0.20
Building Construction 057 Manufacturing	Forklifts	2	7.00	89	0.20
Building Construction 057 Cultivation	Generator Sets	1	8.00	84	0.74
Building Construction 057 Manufacturing	Generator Sets	1	8.00	84	0.74
Grading 056	Graders	1	8.00	187	0.41
Grading 057	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

Ashby Cannabis Campus - Shasta County, Summer

Paving	Rollers	2	8.00	80	0.38
Grading 057	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction 057 Cultivation	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction 057 Manufacturing	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading 057	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction 057 Cultivation	Welders	3	8.00	46	0.45
Building Construction 057 Manufacturing	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading 056	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading 056	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 056	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 056	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 056	1	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 057 Cultivation	1	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 057 Manufacturing	1	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 057 Cultivation	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 057 Manufacturing	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading 057	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Ashby Cannabis Campus - Shasta County, Summer

3.2 Site Preparation - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149		2,372.906 2	2,372.906 2	0.7675		2,392.092 4
Total	1.6521	19.9196	11.2678	0.0245	1.5908	0.7771	2.3678	0.1718	0.7149	0.8867		2,372.906 2	2,372.906 2	0.7675		2,392.092 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0536	0.0367	0.4466	1.1000e-003	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		109.7367	109.7367	3.7900e-003		109.8315
Total	0.0536	0.0367	0.4466	1.1000e-003	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		109.7367	109.7367	3.7900e-003		109.8315

Ashby Cannabis Campus - Shasta County, Summer

3.2 Site Preparation - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149	0.0000	2,372.906 2	2,372.906 2	0.7675		2,392.092 4
Total	1.6521	19.9196	11.2678	0.0245	1.5908	0.7771	2.3678	0.1718	0.7149	0.8867	0.0000	2,372.906 2	2,372.906 2	0.7675		2,392.092 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0536	0.0367	0.4466	1.1000e-003	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		109.7367	109.7367	3.7900e-003		109.8315
Total	0.0536	0.0367	0.4466	1.1000e-003	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		109.7367	109.7367	3.7900e-003		109.8315

Ashby Cannabis Campus - Shasta County, Summer

3.3 Grading 056 - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0014	32.6741	14.0672	0.0291		1.5451	1.5451		1.4215	1.4215		2,823.7486	2,823.7486	0.9133		2,846.5800
Total	3.0014	32.6741	14.0672	0.0291	6.5523	1.5451	8.0975	3.3675	1.4215	4.7890		2,823.7486	2,823.7486	0.9133		2,846.5800

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1741	0.1191	1.4516	3.5800e-003	0.6209	2.2700e-003	0.6231	0.1589	2.0900e-003	0.1610		356.6443	356.6443	0.0123		356.9525
Total	0.1741	0.1191	1.4516	3.5800e-003	0.6209	2.2700e-003	0.6231	0.1589	2.0900e-003	0.1610		356.6443	356.6443	0.0123		356.9525

Ashby Cannabis Campus - Shasta County, Summer

3.3 Grading 056 - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0014	32.6741	14.0672	0.0291		1.5451	1.5451		1.4215	1.4215	0.0000	2,823.7486	2,823.7486	0.9133		2,846.5800
Total	3.0014	32.6741	14.0672	0.0291	6.5523	1.5451	8.0975	3.3675	1.4215	4.7890	0.0000	2,823.7486	2,823.7486	0.9133		2,846.5800

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1741	0.1191	1.4516	3.5800e-003	0.6209	2.2700e-003	0.6231	0.1589	2.0900e-003	0.1610		356.6443	356.6443	0.0123		356.9525
Total	0.1741	0.1191	1.4516	3.5800e-003	0.6209	2.2700e-003	0.6231	0.1589	2.0900e-003	0.1610		356.6443	356.6443	0.0123		356.9525

Ashby Cannabis Campus - Shasta County, Summer

3.4 Building Construction 056 - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.8877	2,288.8877	0.4646		2,300.5014
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.8877	2,288.8877	0.4646		2,300.5014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1216	3.4658	0.7214	8.2000e-003	0.3148	0.0184	0.3332	0.0851	0.0176	0.1027		856.6142	856.6142	0.0694		858.3497
Worker	0.5090	0.3482	4.2430	0.0105	1.8148	6.6300e-003	1.8214	0.4646	6.1100e-003	0.4707		1,042.4987	1,042.4987	0.0360		1,043.3997
Total	0.6306	3.8140	4.9644	0.0187	2.1296	0.0250	2.1546	0.5497	0.0237	0.5734		1,899.1129	1,899.1129	0.1055		1,901.7493

Ashby Cannabis Campus - Shasta County, Summer

3.4 Building Construction 056 - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1216	3.4658	0.7214	8.2000e-003	0.3148	0.0184	0.3332	0.0851	0.0176	0.1027		856.6142	856.6142	0.0694		858.3497
Worker	0.5090	0.3482	4.2430	0.0105	1.8148	6.6300e-003	1.8214	0.4646	6.1100e-003	0.4707		1,042.498 7	1,042.498 7	0.0360		1,043.399 7
Total	0.6306	3.8140	4.9644	0.0187	2.1296	0.0250	2.1546	0.5497	0.0237	0.5734		1,899.112 9	1,899.112 9	0.1055		1,901.749 3

Ashby Cannabis Campus - Shasta County, Summer

3.5 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.2180	1,709.2180	0.5417		1,722.7605

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1005	0.0687	0.8374	2.0700e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		205.7563	205.7563	7.1100e-003		205.9341
Total	0.1005	0.0687	0.8374	2.0700e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		205.7563	205.7563	7.1100e-003		205.9341

Ashby Cannabis Campus - Shasta County, Summer

3.5 Paving - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.2180	1,709.2180	0.5417		1,722.7605

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1005	0.0687	0.8374	2.0700e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		205.7563	205.7563	7.1100e-003		205.9341
Total	0.1005	0.0687	0.8374	2.0700e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		205.7563	205.7563	7.1100e-003		205.9341

Ashby Cannabis Campus - Shasta County, Summer

3.6 Architectural Coating 056 - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	77.0244					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	77.2666	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0536	0.0367	0.4466	1.1000e-003	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		109.7367	109.7367	3.7900e-003		109.8315
Total	0.0536	0.0367	0.4466	1.1000e-003	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		109.7367	109.7367	3.7900e-003		109.8315

Ashby Cannabis Campus - Shasta County, Summer

3.6 Architectural Coating 056 - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	77.0244					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	77.2666	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0536	0.0367	0.4466	1.1000e-003	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		109.7367	109.7367	3.7900e-003		109.8315
Total	0.0536	0.0367	0.4466	1.1000e-003	0.1022	7.0000e-004	0.1029	0.0271	6.4000e-004	0.0277		109.7367	109.7367	3.7900e-003		109.8315

Ashby Cannabis Campus - Shasta County, Summer

3.7 Grading 057 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100		1,995.6114	1,995.6114	0.6454		2,011.7470

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0406	0.5059	1.3300e-003	0.1277	8.4000e-004	0.1286	0.0339	7.8000e-004	0.0347		132.4108	132.4108	4.1800e-003		132.5155
Total	0.0618	0.0406	0.5059	1.3300e-003	0.1277	8.4000e-004	0.1286	0.0339	7.8000e-004	0.0347		132.4108	132.4108	4.1800e-003		132.5155

Ashby Cannabis Campus - Shasta County, Summer

3.7 Grading 057 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0406	0.5059	1.3300e-003	0.1277	8.4000e-004	0.1286	0.0339	7.8000e-004	0.0347		132.4108	132.4108	4.1800e-003		132.5155
Total	0.0618	0.0406	0.5059	1.3300e-003	0.1277	8.4000e-004	0.1286	0.0339	7.8000e-004	0.0347		132.4108	132.4108	4.1800e-003		132.5155

Ashby Cannabis Campus - Shasta County, Summer

3.8 Building Construction 057 Cultivation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0507	1.5888	0.3152	4.0600e-003	0.0920	4.6500e-003	0.0966	0.0265	4.4500e-003	0.0309		424.7473	424.7473	0.0335		425.5838
Worker	0.2349	0.1544	1.9223	5.0500e-003	0.4854	3.2100e-003	0.4886	0.1287	2.9600e-003	0.1317		503.1612	503.1612	0.0159		503.5587
Total	0.2856	1.7432	2.2375	9.1100e-003	0.5773	7.8600e-003	0.5852	0.1552	7.4100e-003	0.1626		927.9084	927.9084	0.0494		929.1425

Ashby Cannabis Campus - Shasta County, Summer

3.8 Building Construction 057 Cultivation - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0507	1.5888	0.3152	4.0600e-003	0.0920	4.6500e-003	0.0966	0.0265	4.4500e-003	0.0309		424.7473	424.7473	0.0335		425.5838
Worker	0.2349	0.1544	1.9223	5.0500e-003	0.4854	3.2100e-003	0.4886	0.1287	2.9600e-003	0.1317		503.1612	503.1612	0.0159		503.5587
Total	0.2856	1.7432	2.2375	9.1100e-003	0.5773	7.8600e-003	0.5852	0.1552	7.4100e-003	0.1626		927.9084	927.9084	0.0494		929.1425

Ashby Cannabis Campus - Shasta County, Summer

3.9 Architectural Coating 057 Cultivation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	66.5123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	66.7312	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0325	0.4047	1.0600e-003	0.1022	6.8000e-004	0.1029	0.0271	6.2000e-004	0.0277		105.9287	105.9287	3.3500e-003		106.0124
Total	0.0494	0.0325	0.4047	1.0600e-003	0.1022	6.8000e-004	0.1029	0.0271	6.2000e-004	0.0277		105.9287	105.9287	3.3500e-003		106.0124

Ashby Cannabis Campus - Shasta County, Summer

3.9 Architectural Coating 057 Cultivation - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	66.5123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	66.7312	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0325	0.4047	1.0600e-003	0.1022	6.8000e-004	0.1029	0.0271	6.2000e-004	0.0277		105.9287	105.9287	3.3500e-003		106.0124
Total	0.0494	0.0325	0.4047	1.0600e-003	0.1022	6.8000e-004	0.1029	0.0271	6.2000e-004	0.0277		105.9287	105.9287	3.3500e-003		106.0124

Ashby Cannabis Campus - Shasta County, Summer

3.10 Building Construction 057 Manufacturing - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
Total	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0472	1.5045	0.2899	4.0300e-003	0.0920	4.0500e-003	0.0960	0.0265	3.8700e-003	0.0304		421.1487	421.1487	0.0321		421.9500
Worker	0.2179	0.1376	1.7508	4.8700e-003	0.4854	3.1200e-003	0.4885	0.1287	2.8700e-003	0.1316		484.9139	484.9139	0.0141		485.2655
Total	0.2651	1.6421	2.0408	8.9000e-003	0.5773	7.1700e-003	0.5845	0.1552	6.7400e-003	0.1619		906.0626	906.0626	0.0461		907.2156

Ashby Cannabis Campus - Shasta County, Summer

3.10 Building Construction 057 Manufacturing - 2022**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
Total	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0472	1.5045	0.2899	4.0300e-003	0.0920	4.0500e-003	0.0960	0.0265	3.8700e-003	0.0304		421.1487	421.1487	0.0321		421.9500
Worker	0.2179	0.1376	1.7508	4.8700e-003	0.4854	3.1200e-003	0.4885	0.1287	2.8700e-003	0.1316		484.9139	484.9139	0.0141		485.2655
Total	0.2651	1.6421	2.0408	8.9000e-003	0.5773	7.1700e-003	0.5845	0.1552	6.7400e-003	0.1619		906.0626	906.0626	0.0461		907.2156

Ashby Cannabis Campus - Shasta County, Summer

3.10 Building Construction 057 Manufacturing - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0355	1.2301	0.2479	3.9600e-003	0.0920	1.6200e-003	0.0936	0.0265	1.5500e-003	0.0280		414.0420	414.0420	0.0226		414.6060
Worker	0.2033	0.1232	1.6028	4.6800e-003	0.4854	3.0400e-003	0.4884	0.1287	2.8000e-003	0.1315		466.5935	466.5935	0.0125		466.9056
Total	0.2388	1.3533	1.8508	8.6400e-003	0.5773	4.6600e-003	0.5820	0.1552	4.3500e-003	0.1596		880.6355	880.6355	0.0350		881.5116

Ashby Cannabis Campus - Shasta County, Summer

3.10 Building Construction 057 Manufacturing - 2023**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0355	1.2301	0.2479	3.9600e-003	0.0920	1.6200e-003	0.0936	0.0265	1.5500e-003	0.0280		414.0420	414.0420	0.0226		414.6060
Worker	0.2033	0.1232	1.6028	4.6800e-003	0.4854	3.0400e-003	0.4884	0.1287	2.8000e-003	0.1315		466.5935	466.5935	0.0125		466.9056
Total	0.2388	1.3533	1.8508	8.6400e-003	0.5773	4.6600e-003	0.5820	0.1552	4.3500e-003	0.1596		880.6355	880.6355	0.0350		881.5116

Ashby Cannabis Campus - Shasta County, Summer

3.11 Architectural Coating 057 Manufacturing - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	123.5992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	123.7909	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0428	0.0259	0.3374	9.9000e-004	0.1022	6.4000e-004	0.1028	0.0271	5.9000e-004	0.0277		98.2302	98.2302	2.6300e-003		98.2959
Total	0.0428	0.0259	0.3374	9.9000e-004	0.1022	6.4000e-004	0.1028	0.0271	5.9000e-004	0.0277		98.2302	98.2302	2.6300e-003		98.2959

Ashby Cannabis Campus - Shasta County, Summer

3.11 Architectural Coating 057 Manufacturing - 2023**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	123.5992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	123.7909	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0428	0.0259	0.3374	9.9000e-004	0.1022	6.4000e-004	0.1028	0.0271	5.9000e-004	0.0277		98.2302	98.2302	2.6300e-003		98.2959
Total	0.0428	0.0259	0.3374	9.9000e-004	0.1022	6.4000e-004	0.1028	0.0271	5.9000e-004	0.0277		98.2302	98.2302	2.6300e-003		98.2959

4.0 Operational Detail - Mobile

Ashby Cannabis Campus - Shasta County, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5279	3.7048	5.5791	0.0201	1.2611	0.0214	1.2825	0.3382	0.0202	0.3584		2,044.6806	2,044.6806	0.1102		2,047.4354
Unmitigated	0.5279	3.7048	5.5791	0.0201	1.2611	0.0214	1.2825	0.3382	0.0202	0.3584		2,044.6806	2,044.6806	0.1102		2,047.4354

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	152.14	152.14	152.14	587,791	587,791
Total	152.14	152.14	152.14	587,791	587,791

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No Rail	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.514295	0.033300	0.182894	0.110648	0.035005	0.006975	0.013104	0.092427	0.001351	0.001296	0.005878	0.001311	0.001516

Ashby Cannabis Campus - Shasta County, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
NaturalGas Unmitigated	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798

Ashby Cannabis Campus - Shasta County, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	4485.82	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
Total		0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	4.48582	0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798
Total		0.0484	0.4398	0.3694	2.6400e-003		0.0334	0.0334		0.0334	0.0334		527.7437	527.7437	0.0101	9.6800e-003	530.8798

6.0 Area Detail**6.1 Mitigation Measures Area**

Ashby Cannabis Campus - Shasta County, Summer

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3690	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Unmitigated	2.5138	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211

Ashby Cannabis Campus - Shasta County, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.7000e-004	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Total	2.5138	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7931					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.7000e-004	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211
Total	2.3690	9.0000e-005	9.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0198	0.0198	5.0000e-005		0.0211

7.0 Water Detail

Ashby Cannabis Campus - Shasta County, Summer

7.1 Mitigation Measures Water

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

ATTACHMENT B

CalEEMod Output Files – Greenhouse Gas Emissions

Ashby Cannabis Campus - Shasta County, Annual

Ashby Cannabis Campus

Shasta County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	90.56	1000sqft	2.08	90,560.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E used as comperable substitute for City of Shasta Lake Electric Utility.

Land Use - Development footprint = 7.3 acres

Construction Phase - Cultivation buildings can each be built in two weeks.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Ashby Cannabis Campus - Shasta County, Annual

Off-road Equipment - All paved surfaces will be composed of concrete

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Demolition - No demolitions needed (vacant undeveloped land).

Trips and VMT -

Road Dust - Speed limit of 15 mph throughout the Project Property

Landscape Equipment - Typically at least one snow day per year.

Energy Use -

Land Use Change -

Sequestration -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - LED lights will be used throughout the Project.

Waste Mitigation -

Architectural Coating - One-third of Cultivation Buildings will be cover with transparent polycarbonate to allow light to pass into the buildings. No Architectural coatings will be applied to the transparent polycarbonate sections of the Cultivation Buildings (1/3 less exterior area for architectural coating). Actual surface area of Distribution, Processing, and Cultivation Buildings for application of architectural coatings is 4,536 sq. ft. (8 buildings on 056 and 6 buildings on 057).

Ashby Cannabis Campus - Shasta County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	45,280.00	30,184.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	45,280.00	30,184.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	45,280.00	26,666.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	135,840.00	36,288.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	135,840.00	27,216.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	135,840.00	80,000.00
tblConstructionPhase	PhaseEndDate	4/11/2023	10/27/2020
tblConstructionPhase	PhaseEndDate	3/14/2023	7/7/2020
tblConstructionPhase	PhaseEndDate	5/11/2021	9/29/2020
tblConstructionPhase	PhaseEndDate	6/23/2020	5/12/2021
tblConstructionPhase	PhaseEndDate	3/29/2022	8/4/2021
tblConstructionPhase	PhaseEndDate	5/9/2023	9/1/2021
tblConstructionPhase	PhaseEndDate	2/14/2023	3/3/2023
tblConstructionPhase	PhaseEndDate	6/6/2023	5/12/2023
tblConstructionPhase	PhaseStartDate	3/15/2023	9/30/2020
tblConstructionPhase	PhaseStartDate	2/15/2023	6/10/2020
tblConstructionPhase	PhaseStartDate	6/24/2020	6/10/2020
tblConstructionPhase	PhaseStartDate	5/27/2020	4/15/2021
tblConstructionPhase	PhaseStartDate	4/12/2023	8/5/2021
tblConstructionPhase	PhaseStartDate	3/30/2022	4/18/2022
tblConstructionPhase	PhaseStartDate	5/10/2023	4/17/2023
tblLandscapeEquipment	NumberSnowDays	0	1
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	200.00

2.0 Emissions Summary

Ashby Cannabis Campus - Shasta County, Annual

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.9395	1.4148	1.1235	2.3900e-003	0.1634	0.0660	0.2294	0.0578	0.0623	0.1201	0.0000	207.8911	207.8911	0.0377	0.0000	208.8341
2021	0.7567	0.7612	0.6257	1.2800e-003	0.0845	0.0353	0.1198	0.0388	0.0335	0.0723	0.0000	109.9664	109.9664	0.0199	0.0000	110.4641
2022	0.1935	1.5055	1.4887	3.0800e-003	0.0509	0.0656	0.1165	0.0137	0.0629	0.0766	0.0000	263.3430	263.3430	0.0409	0.0000	264.3661
2023	1.2816	0.3508	0.3760	7.8000e-004	0.0134	0.0146	0.0280	3.6000e-003	0.0140	0.0176	0.0000	66.9348	66.9348	9.7200e-003	0.0000	67.1777
Maximum	1.2816	1.5055	1.4887	3.0800e-003	0.1634	0.0660	0.2294	0.0578	0.0629	0.1201	0.0000	263.3430	263.3430	0.0409	0.0000	264.3661

Ashby Cannabis Campus - Shasta County, Annual

2.1 Overall Construction**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.9395	1.4148	1.1235	2.3900e-003	0.1634	0.0660	0.2294	0.0578	0.0623	0.1201	0.0000	207.8909	207.8909	0.0377	0.0000	208.8339
2021	0.7567	0.7612	0.6257	1.2800e-003	0.0845	0.0353	0.1198	0.0388	0.0335	0.0723	0.0000	109.9663	109.9663	0.0199	0.0000	110.4640
2022	0.1935	1.5055	1.4887	3.0800e-003	0.0509	0.0656	0.1165	0.0137	0.0629	0.0766	0.0000	263.3427	263.3427	0.0409	0.0000	264.3659
2023	1.2816	0.3508	0.3760	7.8000e-004	0.0134	0.0146	0.0280	3.6000e-003	0.0140	0.0176	0.0000	66.9347	66.9347	9.7200e-003	0.0000	67.1777
Maximum	1.2816	1.5055	1.4887	3.0800e-003	0.1634	0.0660	0.2294	0.0578	0.0629	0.1201	0.0000	263.3427	263.3427	0.0409	0.0000	264.3659

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-15-2020	7-14-2020	0.8992	0.8992
2	7-15-2020	10-14-2020	1.0880	1.0880
3	10-15-2020	1-14-2021	0.3670	0.3670
5	4-15-2021	7-14-2021	0.6809	0.6809
6	7-15-2021	10-14-2021	0.8342	0.8342
9	4-15-2022	7-14-2022	0.5772	0.5772
10	7-15-2022	10-14-2022	0.6036	0.6036
11	10-15-2022	1-14-2023	0.5973	0.5973

Ashby Cannabis Campus - Shasta County, Annual

12	1-15-2023	4-14-2023	0.2906	0.2906
13	4-15-2023	7-14-2023	1.1622	1.1622
		Highest	1.1622	1.1622

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4587	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
Energy	8.8300e-003	0.0803	0.0674	4.8000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	334.7529	334.7529	0.0129	3.9200e-003	336.2414
Mobile	0.0776	0.6929	0.8895	3.4200e-003	0.2186	3.9100e-003	0.2225	0.0589	3.6900e-003	0.0626	0.0000	315.9695	315.9695	0.0181	0.0000	316.4209
Waste						0.0000	0.0000		0.0000	0.0000	17.2806	0.0000	17.2806	1.0213	0.0000	42.8120
Water						0.0000	0.0000		0.0000	0.0000	6.6439	32.9653	39.6092	0.6839	0.0164	61.5999
Total	0.5452	0.7732	0.9578	3.9000e-003	0.2186	0.0100	0.2286	0.0589	9.7900e-003	0.0687	23.9246	683.6893	707.6138	1.7361	0.0203	757.0759

Ashby Cannabis Campus - Shasta County, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4323	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
Energy	8.8300e-003	0.0803	0.0674	4.8000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	271.1299	271.1299	9.9800e-003	3.3200e-003	272.3691
Mobile	0.0776	0.6929	0.8895	3.4200e-003	0.2186	3.9100e-003	0.2225	0.0589	3.6900e-003	0.0626	0.0000	315.9695	315.9695	0.0181	0.0000	316.4209
Waste						0.0000	0.0000		0.0000	0.0000	8.6403	0.0000	8.6403	0.5106	0.0000	21.4060
Water						0.0000	0.0000		0.0000	0.0000	6.6439	32.9653	39.6092	0.6839	0.0164	61.5999
Total	0.5187	0.7732	0.9578	3.9000e-003	0.2186	0.0100	0.2286	0.0589	9.7900e-003	0.0687	15.2842	620.0662	635.3505	1.2226	0.0197	671.7976

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.11	9.31	10.21	29.58	2.95	11.26

Ashby Cannabis Campus - Shasta County, Annual

2.3 Vegetation**Vegetation**

	CO2e
Category	MT
New Trees	146.8000
Vegetation Land Change	0.0000
Total	146.8000

3.0 Construction Detail

Construction Phase

Ashby Cannabis Campus - Shasta County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/15/2020	4/28/2020	5	3	Phase 1
2	Grading 056	Grading	4/29/2020	5/26/2020	5	6	Phase 1/2
3	Building Construction 056	Building Construction	6/10/2020	9/29/2020	5	220	Phase 1/2
4	Paving	Paving	6/10/2020	7/7/2020	5	10	Phase 1/2
5	Architectural Coating 056	Architectural Coating	9/30/2020	10/27/2020	5	10	Phase 1/2
6	Grading 057	Grading	4/15/2021	5/12/2021	5	6	Phase 3/4
7	Building Construction 057 Cultivation	Building Construction	5/12/2021	8/4/2021	5	220	Phase 3/4
8	Architectural Coating 057 Cultivation	Architectural Coating	8/5/2021	9/1/2021	5	10	Phase 3/4
9	Building Construction 057 Manufacturing	Building Construction	4/18/2022	3/3/2023	5	220	Phase 4
10	Architectural Coating 057 Manufacturing	Architectural Coating	4/17/2023	5/12/2023	5	10	Phase 4

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 36,288; Non-Residential Outdoor: 30,184; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating 056	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction 056	Cranes	1	8.00	231	0.29
Building Construction 056	Forklifts	2	7.00	89	0.20

Ashby Cannabis Campus - Shasta County, Annual

Building Construction 056	Generator Sets	1	8.00	84	0.74
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading 056	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction 056	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading 056	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading 056	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction 056	Welders	3	8.00	46	0.45
Architectural Coating 057 Cultivation	Air Compressors	1	6.00	78	0.48
Architectural Coating 057 Manufacturing	Air Compressors	1	6.00	78	0.48
Building Construction 057 Cultivation	Cranes	1	8.00	231	0.29
Building Construction 057 Manufacturing	Cranes	1	8.00	231	0.29
Building Construction 057 Cultivation	Forklifts	2	7.00	89	0.20
Building Construction 057 Manufacturing	Forklifts	2	7.00	89	0.20
Building Construction 057 Cultivation	Generator Sets	1	8.00	84	0.74
Building Construction 057 Manufacturing	Generator Sets	1	8.00	84	0.74
Grading 056	Graders	1	8.00	187	0.41
Grading 057	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading 057	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction 057 Cultivation	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction 057 Manufacturing	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading 057	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction 057 Cultivation	Welders	3	8.00	46	0.45

Ashby Cannabis Campus - Shasta County, Annual

Building Construction 057 Manufacturing	Welders	3	8.00	46	0.45
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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading 056	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading 056	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 056	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 056	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 056	1	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 057 Cultivation	1	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 057 Manufacturing	1	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 057 Cultivation	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 057 Manufacturing	8	38.00	15.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading 057	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Ashby Cannabis Campus - Shasta County, Annual

3.2 Site Preparation - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.9500e-003	0.0000	7.9500e-003	8.6000e-004	0.0000	8.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2600e-003	0.0996	0.0563	1.2000e-004		3.8900e-003	3.8900e-003		3.5700e-003	3.5700e-003	0.0000	10.7633	10.7633	3.4800e-003	0.0000	10.8504
Total	8.2600e-003	0.0996	0.0563	1.2000e-004	7.9500e-003	3.8900e-003	0.0118	8.6000e-004	3.5700e-003	4.4300e-003	0.0000	10.7633	10.7633	3.4800e-003	0.0000	10.8504

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	2.0000e-004	1.8200e-003	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4456	0.4456	1.0000e-005	0.0000	0.4460
Total	2.3000e-004	2.0000e-004	1.8200e-003	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4456	0.4456	1.0000e-005	0.0000	0.4460

Ashby Cannabis Campus - Shasta County, Annual

3.2 Site Preparation - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.9500e-003	0.0000	7.9500e-003	8.6000e-004	0.0000	8.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2600e-003	0.0996	0.0563	1.2000e-004		3.8900e-003	3.8900e-003		3.5700e-003	3.5700e-003	0.0000	10.7633	10.7633	3.4800e-003	0.0000	10.8503
Total	8.2600e-003	0.0996	0.0563	1.2000e-004	7.9500e-003	3.8900e-003	0.0118	8.6000e-004	3.5700e-003	4.4300e-003	0.0000	10.7633	10.7633	3.4800e-003	0.0000	10.8503

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	2.0000e-004	1.8200e-003	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4456	0.4456	1.0000e-005	0.0000	0.4460
Total	2.3000e-004	2.0000e-004	1.8200e-003	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4456	0.4456	1.0000e-005	0.0000	0.4460

Ashby Cannabis Campus - Shasta County, Annual

3.3 Grading 056 - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0300	0.3267	0.1407	2.9000e-004		0.0155	0.0155		0.0142	0.0142	0.0000	25.6166	25.6166	8.2800e-003	0.0000	25.8237
Total	0.0300	0.3267	0.1407	2.9000e-004	0.0655	0.0155	0.0810	0.0337	0.0142	0.0479	0.0000	25.6166	25.6166	8.2800e-003	0.0000	25.8237

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	1.2800e-003	0.0119	3.0000e-005	5.8800e-003	2.0000e-005	5.9100e-003	1.5100e-003	2.0000e-005	1.5300e-003	0.0000	2.8967	2.8967	1.0000e-004	0.0000	2.8991
Total	1.5000e-003	1.2800e-003	0.0119	3.0000e-005	5.8800e-003	2.0000e-005	5.9100e-003	1.5100e-003	2.0000e-005	1.5300e-003	0.0000	2.8967	2.8967	1.0000e-004	0.0000	2.8991

Ashby Cannabis Campus - Shasta County, Annual

3.3 Grading 056 - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0300	0.3267	0.1407	2.9000e-004		0.0155	0.0155		0.0142	0.0142	0.0000	25.6166	25.6166	8.2800e-003	0.0000	25.8237
Total	0.0300	0.3267	0.1407	2.9000e-004	0.0655	0.0155	0.0810	0.0337	0.0142	0.0479	0.0000	25.6166	25.6166	8.2800e-003	0.0000	25.8237

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	1.2800e-003	0.0119	3.0000e-005	5.8800e-003	2.0000e-005	5.9100e-003	1.5100e-003	2.0000e-005	1.5300e-003	0.0000	2.8967	2.8967	1.0000e-004	0.0000	2.8991
Total	1.5000e-003	1.2800e-003	0.0119	3.0000e-005	5.8800e-003	2.0000e-005	5.9100e-003	1.5100e-003	2.0000e-005	1.5300e-003	0.0000	2.8967	2.8967	1.0000e-004	0.0000	2.8991

Ashby Cannabis Campus - Shasta County, Annual

3.4 Building Construction 056 - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0915	0.6973	0.5959	1.0000e-003		0.0379	0.0379		0.0364	0.0364	0.0000	83.0578	83.0578	0.0169	0.0000	83.4792
Total	0.0915	0.6973	0.5959	1.0000e-003		0.0379	0.0379		0.0364	0.0364	0.0000	83.0578	83.0578	0.0169	0.0000	83.4792

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.9400e-003	0.1409	0.0314	3.2000e-004	0.0120	7.4000e-004	0.0128	3.2600e-003	7.1000e-004	3.9700e-003	0.0000	30.6209	30.6209	2.6600e-003	0.0000	30.6873
Worker	0.0175	0.0150	0.1387	3.7000e-004	0.0688	2.7000e-004	0.0691	0.0177	2.4000e-004	0.0179	0.0000	33.8688	33.8688	1.1300e-003	0.0000	33.8970
Total	0.0225	0.1558	0.1700	6.9000e-004	0.0808	1.0100e-003	0.0818	0.0209	9.5000e-004	0.0219	0.0000	64.4896	64.4896	3.7900e-003	0.0000	64.5843

Ashby Cannabis Campus - Shasta County, Annual

3.4 Building Construction 056 - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0915	0.6973	0.5959	1.0000e-003		0.0379	0.0379		0.0364	0.0364	0.0000	83.0577	83.0577	0.0169	0.0000	83.4791
Total	0.0915	0.6973	0.5959	1.0000e-003		0.0379	0.0379		0.0364	0.0364	0.0000	83.0577	83.0577	0.0169	0.0000	83.4791

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.9400e-003	0.1409	0.0314	3.2000e-004	0.0120	7.4000e-004	0.0128	3.2600e-003	7.1000e-004	3.9700e-003	0.0000	30.6209	30.6209	2.6600e-003	0.0000	30.6873
Worker	0.0175	0.0150	0.1387	3.7000e-004	0.0688	2.7000e-004	0.0691	0.0177	2.4000e-004	0.0179	0.0000	33.8688	33.8688	1.1300e-003	0.0000	33.8970
Total	0.0225	0.1558	0.1700	6.9000e-004	0.0808	1.0100e-003	0.0818	0.0209	9.5000e-004	0.0219	0.0000	64.4896	64.4896	3.7900e-003	0.0000	64.5843

Ashby Cannabis Campus - Shasta County, Annual

3.5 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0116	0.1159	0.1181	1.8000e-004		6.5700e-003	6.5700e-003		6.0500e-003	6.0500e-003	0.0000	15.5058	15.5058	4.9100e-003	0.0000	15.6286
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0116	0.1159	0.1181	1.8000e-004		6.5700e-003	6.5700e-003		6.0500e-003	6.0500e-003	0.0000	15.5058	15.5058	4.9100e-003	0.0000	15.6286

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	7.4000e-004	6.8400e-003	2.0000e-005	1.8200e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6712	1.6712	6.0000e-005	0.0000	1.6726
Total	8.7000e-004	7.4000e-004	6.8400e-003	2.0000e-005	1.8200e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6712	1.6712	6.0000e-005	0.0000	1.6726

Ashby Cannabis Campus - Shasta County, Annual

3.5 Paving - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0116	0.1159	0.1181	1.8000e-004		6.5700e-003	6.5700e-003		6.0500e-003	6.0500e-003	0.0000	15.5058	15.5058	4.9100e-003	0.0000	15.6286
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0116	0.1159	0.1181	1.8000e-004		6.5700e-003	6.5700e-003		6.0500e-003	6.0500e-003	0.0000	15.5058	15.5058	4.9100e-003	0.0000	15.6286

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	7.4000e-004	6.8400e-003	2.0000e-005	1.8200e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6712	1.6712	6.0000e-005	0.0000	1.6726
Total	8.7000e-004	7.4000e-004	6.8400e-003	2.0000e-005	1.8200e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6712	1.6712	6.0000e-005	0.0000	1.6726

Ashby Cannabis Campus - Shasta County, Annual

3.6 Architectural Coating 056 - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7702					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	0.7727	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.9000e-004	3.6500e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8920
Total	4.6000e-004	3.9000e-004	3.6500e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8920

Ashby Cannabis Campus - Shasta County, Annual

3.6 Architectural Coating 056 - 2020**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7702					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	0.7727	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.9000e-004	3.6500e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8920
Total	4.6000e-004	3.9000e-004	3.6500e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8920

Ashby Cannabis Campus - Shasta County, Annual

3.7 Grading 057 - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.2021	0.0976	2.1000e-004		9.1600e-003	9.1600e-003		8.4200e-003	8.4200e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503
Total	0.0183	0.2021	0.0976	2.1000e-004	0.0655	9.1600e-003	0.0747	0.0337	8.4200e-003	0.0421	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	4.4000e-004	4.1200e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0755	1.0755	3.0000e-005	0.0000	1.0763
Total	5.3000e-004	4.4000e-004	4.1200e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0755	1.0755	3.0000e-005	0.0000	1.0763

Ashby Cannabis Campus - Shasta County, Annual

3.7 Grading 057 - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.2021	0.0976	2.1000e-004		9.1600e-003	9.1600e-003		8.4200e-003	8.4200e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2502
Total	0.0183	0.2021	0.0976	2.1000e-004	0.0655	9.1600e-003	0.0747	0.0337	8.4200e-003	0.0421	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2502

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	4.4000e-004	4.1200e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0755	1.0755	3.0000e-005	0.0000	1.0763
Total	5.3000e-004	4.4000e-004	4.1200e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0755	1.0755	3.0000e-005	0.0000	1.0763

Ashby Cannabis Campus - Shasta County, Annual

3.8 Building Construction 057 Cultivation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0624	0.4888	0.4442	7.6000e-004		0.0249	0.0249		0.0239	0.0239	0.0000	63.3329	63.3329	0.0125	0.0000	63.6444
Total	0.0624	0.4888	0.4442	7.6000e-004		0.0249	0.0249		0.0239	0.0239	0.0000	63.3329	63.3329	0.0125	0.0000	63.6444

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5700e-003	0.0491	0.0105	1.2000e-004	2.6900e-003	1.4000e-004	2.8400e-003	7.8000e-004	1.4000e-004	9.2000e-004	0.0000	11.5761	11.5761	9.8000e-004	0.0000	11.6005
Worker	6.1800e-003	5.0500e-003	0.0478	1.4000e-004	0.0141	1.0000e-004	0.0142	3.7500e-003	9.0000e-005	3.8400e-003	0.0000	12.4645	12.4645	3.8000e-004	0.0000	12.4740
Total	7.7500e-003	0.0542	0.0583	2.6000e-004	0.0168	2.4000e-004	0.0170	4.5300e-003	2.3000e-004	4.7600e-003	0.0000	24.0406	24.0406	1.3600e-003	0.0000	24.0745

Ashby Cannabis Campus - Shasta County, Annual

3.8 Building Construction 057 Cultivation - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0624	0.4888	0.4442	7.6000e-004		0.0249	0.0249		0.0239	0.0239	0.0000	63.3328	63.3328	0.0125	0.0000	63.6443
Total	0.0624	0.4888	0.4442	7.6000e-004		0.0249	0.0249		0.0239	0.0239	0.0000	63.3328	63.3328	0.0125	0.0000	63.6443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5700e-003	0.0491	0.0105	1.2000e-004	2.6900e-003	1.4000e-004	2.8400e-003	7.8000e-004	1.4000e-004	9.2000e-004	0.0000	11.5761	11.5761	9.8000e-004	0.0000	11.6005
Worker	6.1800e-003	5.0500e-003	0.0478	1.4000e-004	0.0141	1.0000e-004	0.0142	3.7500e-003	9.0000e-005	3.8400e-003	0.0000	12.4645	12.4645	3.8000e-004	0.0000	12.4740
Total	7.7500e-003	0.0542	0.0583	2.6000e-004	0.0168	2.4000e-004	0.0170	4.5300e-003	2.3000e-004	4.7600e-003	0.0000	24.0406	24.0406	1.3600e-003	0.0000	24.0745

Ashby Cannabis Campus - Shasta County, Annual

3.9 Architectural Coating 057 Cultivation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6651					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.6673	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.5000e-004	3.3000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8604	0.8604	3.0000e-005	0.0000	0.8610
Total	4.3000e-004	3.5000e-004	3.3000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8604	0.8604	3.0000e-005	0.0000	0.8610

Ashby Cannabis Campus - Shasta County, Annual

3.9 Architectural Coating 057 Cultivation - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6651					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.6673	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.5000e-004	3.3000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8604	0.8604	3.0000e-005	0.0000	0.8610
Total	4.3000e-004	3.5000e-004	3.3000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8604	0.8604	3.0000e-005	0.0000	0.8610

Ashby Cannabis Campus - Shasta County, Annual

3.10 Building Construction 057 Manufacturing - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1716	1.3509	1.3277	2.3100e-003		0.0650	0.0650		0.0623	0.0623	0.0000	192.1041	192.1041	0.0371	0.0000	193.0307
Total	0.1716	1.3509	1.3277	2.3100e-003		0.0650	0.0650		0.0623	0.0623	0.0000	192.1041	192.1041	0.0371	0.0000	193.0307

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4400e-003	0.1409	0.0294	3.7000e-004	8.1700e-003	3.8000e-004	8.5500e-003	2.3700e-003	3.7000e-004	2.7300e-003	0.0000	34.8060	34.8060	2.8400e-003	0.0000	34.8772
Worker	0.0174	0.0136	0.1317	4.0000e-004	0.0427	2.9000e-004	0.0430	0.0114	2.7000e-004	0.0116	0.0000	36.4328	36.4328	1.0200e-003	0.0000	36.4583
Total	0.0219	0.1546	0.1610	7.7000e-004	0.0509	6.7000e-004	0.0515	0.0137	6.4000e-004	0.0144	0.0000	71.2389	71.2389	3.8600e-003	0.0000	71.3355

Ashby Cannabis Campus - Shasta County, Annual

3.10 Building Construction 057 Manufacturing - 2022**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1716	1.3509	1.3277	2.3100e-003		0.0650	0.0650		0.0623	0.0623	0.0000	192.1039	192.1039	0.0371	0.0000	193.0304
Total	0.1716	1.3509	1.3277	2.3100e-003		0.0650	0.0650		0.0623	0.0623	0.0000	192.1039	192.1039	0.0371	0.0000	193.0304

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4400e-003	0.1409	0.0294	3.7000e-004	8.1700e-003	3.8000e-004	8.5500e-003	2.3700e-003	3.7000e-004	2.7300e-003	0.0000	34.8060	34.8060	2.8400e-003	0.0000	34.8772
Worker	0.0174	0.0136	0.1317	4.0000e-004	0.0427	2.9000e-004	0.0430	0.0114	2.7000e-004	0.0116	0.0000	36.4328	36.4328	1.0200e-003	0.0000	36.4583
Total	0.0219	0.1546	0.1610	7.7000e-004	0.0509	6.7000e-004	0.0515	0.0137	6.4000e-004	0.0144	0.0000	71.2389	71.2389	3.8600e-003	0.0000	71.3355

Ashby Cannabis Campus - Shasta County, Annual

3.10 Building Construction 057 Manufacturing - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0386	0.3065	0.3198	5.6000e-004		0.0138	0.0138		0.0132	0.0132	0.0000	46.7330	46.7330	8.8400e-003	0.0000	46.9539
Total	0.0386	0.3065	0.3198	5.6000e-004		0.0138	0.0138		0.0132	0.0132	0.0000	46.7330	46.7330	8.8400e-003	0.0000	46.9539

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1000e-004	0.0280	6.0700e-003	9.0000e-005	1.9900e-003	4.0000e-005	2.0200e-003	5.8000e-004	4.0000e-005	6.1000e-004	0.0000	8.3229	8.3229	4.9000e-004	0.0000	8.3351
Worker	3.9700e-003	2.9700e-003	0.0293	9.0000e-005	0.0104	7.0000e-005	0.0105	2.7700e-003	6.0000e-005	2.8300e-003	0.0000	8.5277	8.5277	2.2000e-004	0.0000	8.5332
Total	4.7800e-003	0.0309	0.0353	1.8000e-004	0.0124	1.1000e-004	0.0125	3.3500e-003	1.0000e-004	3.4400e-003	0.0000	16.8506	16.8506	7.1000e-004	0.0000	16.8683

Ashby Cannabis Campus - Shasta County, Annual

3.10 Building Construction 057 Manufacturing - 2023**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0386	0.3065	0.3198	5.6000e-004		0.0138	0.0138		0.0132	0.0132	0.0000	46.7329	46.7329	8.8400e-003	0.0000	46.9539
Total	0.0386	0.3065	0.3198	5.6000e-004		0.0138	0.0138		0.0132	0.0132	0.0000	46.7329	46.7329	8.8400e-003	0.0000	46.9539

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1000e-004	0.0280	6.0700e-003	9.0000e-005	1.9900e-003	4.0000e-005	2.0200e-003	5.8000e-004	4.0000e-005	6.1000e-004	0.0000	8.3229	8.3229	4.9000e-004	0.0000	8.3351
Worker	3.9700e-003	2.9700e-003	0.0293	9.0000e-005	0.0104	7.0000e-005	0.0105	2.7700e-003	6.0000e-005	2.8300e-003	0.0000	8.5277	8.5277	2.2000e-004	0.0000	8.5332
Total	4.7800e-003	0.0309	0.0353	1.8000e-004	0.0124	1.1000e-004	0.0125	3.3500e-003	1.0000e-004	3.4400e-003	0.0000	16.8506	16.8506	7.1000e-004	0.0000	16.8683

Ashby Cannabis Campus - Shasta County, Annual

3.11 Architectural Coating 057 Manufacturing - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2360					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	1.2379	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.8000e-004	2.7400e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7979	0.7979	2.0000e-005	0.0000	0.7984
Total	3.7000e-004	2.8000e-004	2.7400e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7979	0.7979	2.0000e-005	0.0000	0.7984

Ashby Cannabis Campus - Shasta County, Annual

3.11 Architectural Coating 057 Manufacturing - 2023**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2360					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	1.2379	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.8000e-004	2.7400e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7979	0.7979	2.0000e-005	0.0000	0.7984
Total	3.7000e-004	2.8000e-004	2.7400e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7979	0.7979	2.0000e-005	0.0000	0.7984

4.0 Operational Detail - Mobile

Ashby Cannabis Campus - Shasta County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0776	0.6929	0.8895	3.4200e-003	0.2186	3.9100e-003	0.2225	0.0589	3.6900e-003	0.0626	0.0000	315.9695	315.9695	0.0181	0.0000	316.4209
Unmitigated	0.0776	0.6929	0.8895	3.4200e-003	0.2186	3.9100e-003	0.2225	0.0589	3.6900e-003	0.0626	0.0000	315.9695	315.9695	0.0181	0.0000	316.4209

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	152.14	152.14	152.14	587,791	587,791
Total	152.14	152.14	152.14	587,791	587,791

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No Rail	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.514295	0.033300	0.182894	0.110648	0.035005	0.006975	0.013104	0.092427	0.001351	0.001296	0.005878	0.001311	0.001516

Ashby Cannabis Campus - Shasta County, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	183.7560	183.7560	8.3100e-003	1.7200e-003	184.4760
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	247.3790	247.3790	0.0112	2.3100e-003	248.3483
NaturalGas Mitigated	8.8300e-003	0.0803	0.0674	4.8000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	87.3739	87.3739	1.6700e-003	1.6000e-003	87.8931
NaturalGas Unmitigated	8.8300e-003	0.0803	0.0674	4.8000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	87.3739	87.3739	1.6700e-003	1.6000e-003	87.8931

Ashby Cannabis Campus - Shasta County, Annual

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	1.63732e+006	8.8300e-003	0.0803	0.0674	4.8000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	87.3739	87.3739	1.6700e-003	1.6000e-003	87.8931
Total		8.8300e-003	0.0803	0.0674	4.8000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	87.3739	87.3739	1.6700e-003	1.6000e-003	87.8931

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	1.63732e+006	8.8300e-003	0.0803	0.0674	4.8000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	87.3739	87.3739	1.6700e-003	1.6000e-003	87.8931
Total		8.8300e-003	0.0803	0.0674	4.8000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	87.3739	87.3739	1.6700e-003	1.6000e-003	87.8931

Ashby Cannabis Campus - Shasta County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	850358	247.3790	0.0112	2.3100e-003	248.3483
Total		247.3790	0.0112	2.3100e-003	248.3483

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	631656	183.7560	8.3100e-003	1.7200e-003	184.4760
Total		183.7560	8.3100e-003	1.7200e-003	184.4760

6.0 Area Detail**6.1 Mitigation Measures Area**

Ashby Cannabis Campus - Shasta County, Annual

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4323	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
Unmitigated	0.4587	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003

Ashby Cannabis Campus - Shasta County, Annual

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1049					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3537					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
Total	0.4587	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1049					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3272					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
Total	0.4323	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003

7.0 Water Detail

Ashby Cannabis Campus - Shasta County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	39.6092	0.6839	0.0164	61.5999
Unmitigated	39.6092	0.6839	0.0164	61.5999

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	20.942 / 0	39.6092	0.6839	0.0164	61.5999
Total		39.6092	0.6839	0.0164	61.5999

Ashby Cannabis Campus - Shasta County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	20.942 / 0	39.6092	0.6839	0.0164	61.5999
Total		39.6092	0.6839	0.0164	61.5999

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Ashby Cannabis Campus - Shasta County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.6403	0.5106	0.0000	21.4060
Unmitigated	17.2806	1.0213	0.0000	42.8120

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	85.13	17.2806	1.0213	0.0000	42.8120
Total		17.2806	1.0213	0.0000	42.8120

Ashby Cannabis Campus - Shasta County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	42.565	8.6403	0.5106	0.0000	21.4060
Total		8.6403	0.5106	0.0000	21.4060

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Ashby Cannabis Campus - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	146.8000	0.0000	0.0000	146.8000

11.1 Vegetation Land Change**Vegetation Type**

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Scrub	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Ashby Cannabis Campus - Shasta County, Annual

11.2 Net New Trees**Species Class**

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Mixed Hardwood	200	146.8000	0.0000	0.0000	146.8000
Total		146.8000	0.0000	0.0000	146.8000