

**MITIGATION MONITORING AND REPORTING PROGRAM – Revised December 2022**

Bar X Ranch

Initial Study IS 20-111

Major Use Permit UP 20-92

Impact Category	Mitigation Measures	Implementation Responsibility	Monitoring & Reporting Responsibility	Timing	Date Implemented
<b>Aesthetics</b>					
The project has some potential to impact aesthetics due to greenhouse lighting and security lighting.	AES-1: All outdoor lighting shall be directed downward onto the Project site and not onto adjacent properties. All lighting equipment shall comply with the recommendations of <a href="http://www.darksky.org">www.darksky.org</a> .	Applicant, contractor	Applicant	Prior to operation and life of the project	
	AES-2: All indoor lighting shall be fully contained within structures or otherwise shielded to fully contain any light or glare. Artificial light shall be completely shielded between sunset and sunrise.	Applicant, contractor	Applicant	Prior to operation and life of the project	
	AES-3: Security lighting shall be motion activated and all outdoor lighting shall be shielded and downcast or otherwise positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the lot of record upon which they are placed.	Applicant, contractor	Applicant	Prior to operation and life of the project	
<b>Air Quality</b>					
The project has the potential to create fugitive dust during construction and operation, and expose sensitive receptors to pollutant concentrations and odor.	AQ-1: Prior to obtaining the necessary County grading and building permits and/or approvals, applicant shall contact the Lake County Air Quality Management District and obtain an Authority to Construct (A/C) Permit for all operations and for any diesel-powered equipment and/or other equipment with potential for air emissions. Or provide proof that a permit is not needed. Evidence of compliance with this mitigation measure shall be provided to the Lake County Community	Applicant, contractor	Applicant	Prior to operation	

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	Development Department prior to approval of any building permits for the project.				
	AQ-2: All mobile diesel equipment used must be in compliance with State registration requirements. Portable and stationary diesel powered equipment must meet all Federal, State, and local requirements, including the requirements of the State Air Toxic Control Measures for Compression Ignition (CI) engines. Additionally, the Applicant must notify the Lake County Air Quality Management District prior to beginning construction activities and prior to engine use.	Applicant, contractor	Applicant	During construction and operation	
	AQ-3: The applicant shall maintain records of all hazardous or toxic materials used, including a Material Safety Data Sheet (MSDS) for all volatile organic compounds utilized, including cleaning materials. Said information shall be made available upon request and/or be provided to the Lake County Air Quality Management District if needed to complete an updated Air Toxic emission Inventory.	Applicant; project contractor	Applicant	Life of the project	
	AQ-4: All vegetation during site development shall be chipped and spread for ground cover and/or erosion control. The burning of vegetation, construction debris, including waste material is prohibited.	Applicant; project contractor	Applicant	Life of the project	
	AQ-5: The applicant shall have the primary access and parking areas surfaced with chip seal, asphalt or an equivalent all weather surfacing to reduce fugitive dust generation. The use of white rock as a road base or surface material for travel routes and/or parking areas is prohibited.	Applicant; project contractor	Applicant	Life of the project	
	AQ-6: All areas subject infrequent use of driveways, over flow parking, etc., shall be surfaced with gravel. Applicant shall regularly use and/or maintain graveled area to reduce fugitive dust generations.	Applicant; project contractor	Applicant	Life of the project	

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	<p>AQ-7: Due to the presence of serpentine soil on the property, prior to any construction activities, the applicant shall prepare a Dust Mitigation and Control Plan (Plan) to show how the applicant will keep serpentine soil from migrating during site disturbance. This Plan shall be submitted to the Lake County Community Development Department and will be subject to review and acceptance by the Lake County Building Official and/or Air Quality Control Department. Acceptance of the Plan shall occur prior to the issuance of any grading or building permits for this project.</p>	<p>Applicant; project contractor</p>	<p>Applicant</p>	<p>Prior to operation</p>	
<b>Biological Resources</b>					
<p>Construction of the Project has some potential for disturbing sensitive biological resources.</p>	<p>BIO-1: Should construction activities encroach within 50 feet of the sensitive habitats (riparian and oak woodlands) mapped in the Natural Environment Study (NES) dated October 21, 2021, all construction in the vicinity of the sensitive habitats shall be paused until such time as environmentally sensitive area (ESA) fencing can be installed around these resources to prevent disturbance of the resources. ESA fencing shall be maintained for the duration of the construction activities.</p>	<p>Project contractor; qualified biologist</p>	<p>Applicant</p>	<p>Pre-Construction</p>	

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	<p>BIO-2: Because special-status species that occur in the vicinity could migrate onto the Study Area between the time that the field survey was completed and the start of construction, a pre-construction survey for special-status species shall be performed by a qualified biologist prior to construction to ensure that special-status species are not present. If any listed species are detected, construction should be delayed, and the appropriate wildlife agency (CDFW and/or USFWS) should be consulted and project impacts and mitigation reassessed. With the implementation of this mitigation measure, adverse impacts upon special-status species would be reduced to a less-than-significant level.</p>	Project contractor; qualified biologist	Applicant	Pre-Construction	
	<p>BIO-3: If construction activities would occur during the nesting season (typically February through August), a pre-construction survey for the presence of special-status bird species or any nesting bird species shall be conducted by a qualified biologist within 500 feet of proposed construction areas. If active nests are identified in these areas, CDFW and/or USFWS should be consulted to develop measures to avoid “take” of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.</p>	Project contractor; qualified biologist	Applicant	Pre-Construction	

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	BIO-4: All work should incorporate erosion control measures consistent with the engineered Grading and Erosion Control Plans submitted; the Lake County Grading Regulations, and the State Water Resources Control Board Order No. WQ 2019-0001-DWQ and Construction General Permit 2009-0009-DWQ.	Applicant, Contractor	Applicant	Life of the project	
<b>Cultural, Geological and Tribal Cultural Resources</b>					
Construction of the Project has the potential for accidental discovery of unknown, undiscovered cultural resources and tribal cultural resources.	CUL-1: Should any archaeological, paleontological, or cultural materials be discovered during site development, all activity shall be halted in the vicinity of the find(s), the applicant shall notify the culturally affiliated Tribe, and a qualified archaeologist to evaluate the find(s) and recommend mitigation procedures, if necessary, subject to the approval of the Community Development Director. Should any human remains be encountered, the applicant shall notify the Sheriff’s Department, the culturally affiliated Tribe, and a qualified archaeologist for proper internment and Tribal rituals per Public Resources Code Section 5097.98 and Health and Safety Code 7050.5.	Applicant, Project contractor; Qualified archaeologist	Applicant	During site preparation and throughout construction activities	
	CUL-2: All employees shall be trained in recognizing potentially significant artifacts that may be discovered during ground disturbance. If any artifacts or remains are found, the culturally affiliated Tribe shall immediately be notified; a licensed archaeologist shall be notified, and the Lake County Community Development Director shall be notified of such finds.	Applicant, Project contractor; Qualified archaeologist	Applicant	Prior to site preparation and throughout construction activities	

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	<p>CUL-3: If the site of in situ lithic scatter (P-17-002508) located on the northern end of the proposed left-turn lane construction area cannot be avoided during project related ground disturbance, an archeologist meeting the Secretary of Interior’s Qualifications Standards shall be present to monitor the work.</p>	<p>Applicant, Project contractor; Qualified archaeologist</p>	<p>Applicant</p>	<p>Prior to site preparation and throughout construction activities</p>	
<b>Geology and Soils</b>					
<p>There is some potential for hydrologically-related impacts from the project and minor ground disturbance activities; therefore mitigation measures are incorporated to mitigate water-related and ground disturbance impacts.</p>	<p>GEO-1: During the rainy season (typically October 15 to April 15), to stabilize the soil and prevent sediment runoff, all disturbed soils within portions of the Riverside Garden within Zone A of Putah Creek shall be planted with a nutrient binding cover crop. The cover crop shall be installed by October 15, or upon removal of cannabis plants, whichever comes later.</p>	<p>Applicant, contractor</p>	<p>Applicant</p>	<p>Life of the project</p>	
	<p>GEO-2: Prior to any ground disturbance for building construction, the permittee shall submit engineered erosion control and sediment plans to the Lake County Water Resource Department and the Lake County Community Development Department for review and approval. Said engineered erosion control and sediment plans shall show all earth being imported, exported or moved within the site, and shall show the method(s) used to protect the local watershed from runoff pollution through the implementation of appropriate Best Management Practices (BMPs) in accordance with the Lake County Grading Ordinance (Chapter 30 of the Lake County Code). Typical BMPs include the placement of straw, mulch, seeding, straw wattles, silt fencing, and the planting of native vegetation on all disturbed areas. No silt, sediment, or other materials exceeding natural background levels shall</p>	<p>Applicant, contractor</p>	<p>Applicant</p>	<p>Prior to site preparation and construction activities</p>	

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	<p>be allowed to flow from the project area. The natural background level is the level of erosion that currently occurs from the area in a natural, undisturbed state. Vegetative cover and water bars shall be used as permanent erosion control after project installation.</p>				
	<p>GEO-3: Excavation, filling, vegetation clearing, or other disturbance of the soil shall not occur between October 15 and April 15 unless authorized by the Lake County Community Development Department Director. The actual dates of this defined grading period may be adjusted according to weather and soil conditions at the discretion of the Community Development Director.</p>	Applicant	Applicant	During construction and for the life of the project	
	<p>GEO-4: The permit holder shall monitor the site during the rainy season (October 15 – May 15), including post-installation, application of BMPs, erosion control maintenance, and other improvements as needed.</p>	Applicant	Applicant	During construction and for the life of the project	
	<p>GEO-5: The project design shall incorporate Best Management Practices (BMPs) to the maximum extent practicable to prevent or reduce the discharge of all construction or post-construction pollutants into the County storm drainage system. BMPs typically include scheduling of activities, erosion and sediment control, operation and maintenance procedures, and other measures in accordance with Chapters 29 and 30 of the Lake County Code.</p>	Applicant	Applicant	Prior and during construction and for the life of the project	
	<p>GEO-6: Prior to operation, all buildings, accessible compliant parking areas, routes of travel, building access, and bathrooms shall meet all California Building Code Requirements.</p>	Applicant	Applicant	Prior to construction	
	<p>GEO-7: Prior to operation of Phase 2, all structure(s) used for commercial cultivation shall meet accessibility and CALFIRE standards. The Building Division of the Lake County Community Development Department shall ensure the project</p>	Applicant	Applicant	Prior to construction	

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	plans conform to the relevant codes and standards for accessibility and CALFIRE standards prior to approving any building permit application.				
<b>Hazards and Hazardous Materials</b>					
Exposure to hazard and hazardous materials can occur during and after construction. However, preventative measures, including mitigation and Best Management Practices mitigate to less than significant.	HAZ-1: All equipment shall be maintained and operated to minimize spillage or leakage of hazardous materials. All equipment shall be refueled in locations more than 100 feet from surface water bodies. Servicing of equipment shall occur on an impermeable surface. In an event of a spill or leak, the contaminated soil shall be stored, transported, and disposed of consistent with applicable local, state, and federal regulations.	Applicant	Applicant, Community Development Department	The life of the project	
	HAZ-2: The storage of hazardous materials equal to or greater than fifty-five (55) gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, then a Hazardous Materials Inventory Disclosure Statement/Business Plan shall be submitted and maintained in compliance with requirements of Lake County Environmental Health Division. Industrial waste shall not be disposed of on site without review or permit from Lake County Environmental Health Division or the California Regional Water Quality Control Board. The permit holder shall comply with petroleum fuel storage tank regulations if fuel is to be stored on site.	Applicant	Applicant, Community Development Department	The life of the project	
	HAZ-3: Prior to operation, the applicant shall schedule an inspection with the Lake County Code Enforcement Division within the Community Development Department to verify adherence to all requirements of Chapter 13 of the Lake County Code, including but not limited	Applicant	Applicant	Prior to operation	

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	to adherence with the Hazardous Vegetation requirements.				
	HAZ-4: Prior to operation, all employees shall have access to restrooms and hand-wash stations. The restrooms and hand wash stations shall meet all accessibility requirements.	Applicant	Applicant	Prior to operation, life of the project	
	HAZ-5: The proper storage of equipment, removal of litter and waste, and cutting of weeds or grass shall not constitute an attractant, breeding place, or harborage for pests.	Applicant	Applicant	The life of the project	
	HAZ-6: All food scraps, wrappers, food containers, cans, bottles, and other trash from the project area should be deposited in trash containers with an adequate lid or cover to contain trash. All food waste should be placed in a securely covered bin and removed from the site weekly to avoid attracting animals.	Applicant	Applicant	The life of the project	
	HAZ-7: The applicant shall maintain records of all hazardous or toxic materials used, including a Material Safety Data Sheet (MSDS) for all volatile organic compounds utilized, including cleaning materials. Said information shall be made available upon request and/or the ability to provide the Lake County Air Quality Management District such information to complete an updated Air Toxic Emission Inventory.	Applicant	Applicant	The life of the project	
<b>Hydrology and Water Quality</b>					

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<p>There is some potential for impacts related to groundwater supply and sustainable management of the groundwater basin, therefore, mitigation measures are incorporated to mitigate the potential impacts.</p>	<p>HYD-1: The project shall conduct seasonal monitoring of the water level in the irrigation well and record the water level at least once in the spring (March/April) before cultivation activities begin and once in the fall (October/November) after cultivation is complete. Records shall be kept, and elevations reported to Lake County as part of the project’s annual reporting requirements. Reporting shall include a hydrograph plot of all seasonal water level measurements recorded to-date, beginning with the initial measurement. A continuous water level monitor shall be utilized.</p> <p>The project shall conduct monitoring of the water level in the well during the irrigation period. The frequency of water level monitoring will depend on the source, the source’s capacity, and the pumping rate. Records shall be kept, and elevations reported to Lake County as part of the project’s annual reporting requirements. Reporting shall include a hydrograph plot of the water level measurements during the cultivation season and compared to prior seasons.</p> <p>Measuring a water level in a well can be difficult and the level of difficulty will depend on site-specific conditions. As part of the well monitoring program, the well owner/operator shall work with a well expert to determine the appropriate methodology and equipment to measure the water level in their well(s) as well as who would conduct the monitoring and recording of the well level data. The methodology of the well monitoring program shall be described and provided in the project’s annual report to Lake County.</p>	<p>Applicant/Contract or</p>	<p>Applicant</p>	<p>During operation, Life of the project</p>	

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	In addition to monitoring and reporting, an analysis of the water level monitoring data shall be provided and included in the project's annual report, demonstrating whether use of the well is causing significant drawdown and/or impacts to the surrounding area and what measures were taken to reduce impacts. If there are impacts, a revised Water Management Plan shall be prepared and submitted to Lake County, for review and approval prior to the use of groundwater for the subsequent season, demonstrating how the project would mitigate the impacts.				
<b>Noise</b>					
There is some potential for noise-related impacts from the project; therefore mitigation measures are incorporated to mitigate noise-related impacts.	NOI-1: All construction activities including engine warm-up shall be limited Monday Through Friday, between the hours of 7:00am and 7:00pm, and Saturdays from 12:00 noon to 5:00 p.m. to minimize noise impacts on nearby residents. Back-up beepers shall be adjusted to the lowest allowable levels. This mitigation does not apply to night work.	Applicant	Applicant	During site development and construction	
	NOI-2: The proposed project shall comply with the noise standards identified in Section 41.11 of the Zoning Ordinance, including, but not limited to: maximum non-construction project-related noise levels shall not exceed: (a) 55 dBA between the hours of 7:00 a.m. to 10:00 p.m. and 45 dBA between the hours of 10:00 p.m. to 7:00 a.m. adjacent to residential districts; and (b) 65 dBA between the hours of 7:00 a.m. to 10:00 p.m. and 50 dBA between the hours of 10:00 p.m. to 7:00 a.m. adjacent to industrial districts at the property lines as outlined in Table 11.1. Should the proposed project exceed these noise standards during construction or operational phases, noise-generating activities shall cease until noise attenuation measures are	Applicant	Applicant	During operation	

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	implemented such that the proposed project is compliant with noise standards.				
<b>Transportation</b>					
There is some potential for transportation-related impacts from the project; therefore mitigation measures are incorporated to mitigate transportation-related impacts.	TRA-1: Seasonal laborers shall be transported to and from the project site using a vanpool or similar system. Records of vanpooling shall be kept and reported to Lake County with the project’s annual reports.	Applicant	Applicant	Life of the project	
	TRA-2: Access to the site shall be restricted to the center driveway. Gates to the northern and southern driveways shall be locked and include signage stating, “Emergency Access Only”. The northern and southern entrances shall be utilized only in the event of an emergency	Applicant	Applicant	Life of the project	
	TRA-3: Prior to operation, a Temporary Traffic Control Plan shall be prepared and submitted to Caltrans for approval of an Encroachment Permit for traffic control on a State highway. The purpose of the Temporary Traffic Control Plan is to identify measures to be taken to control left-turn access to the center driveway during weekday p.m. peak hours until construction of the left-turn lane is complete.	Applicant; Project contractor	Applicant, Project contractor	Prior to Construction and operation	