4.0 MITIGATION MONITORING AND REPORTING PLAN

4.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that a Lead Agency establish a program to report on and monitor measures adopted as part of the environmental review process to mitigate or avoid significant effects on the environment. This Mitigation Monitoring and Reporting Plan (MMRP) is designed to ensure that the mitigation measures identified in the Environmental Impact Report (EIR) for the Guenoc Valley Mixed Use Planned Development Project (Proposed Project) are fully implemented. The MMRP, as presented in **Table 4-1**, describes the implementation and timingof mitigation responsibilities and standards, and verification of compliance for the mitigation measures identified in the Draft EIR.

Table 4-1 presents all applicable requirements of the recommended mitigation measures and is organized in the same order as the contents of the EIR, by topic. Monitoring responsibilities have been distributed between the County and the Applicant under this MMRP. All monitoring actions, once completed, would be reported (in writing) to Lake County staff, which would maintain mitigation monitoring records for the Proposed Project.

The components of the MMRP table are described below.

- **Mitigation Measure:** The mitigation measures are taken verbatim from the Draft EIR or, when a revision has been made, from the Final EIR. Mitigation measures are assigned the same number as in the EIR.
- **Implementation and Timing:** Identifies the timing for the implementation of each action.
- **Responsibility for Implementation:** Identifies the authority responsible for implementing the mitigation measure.
- **Responsibility for Monitoring:** Identifies the authority responsible for monitoring implementation of the mitigation measure.

TABLE 4-1
MITIGATION MONITORING AND REPORTING PLAN

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.1	**Aesthetics**			
3.1-1	**Off-Site Workforce Housing Lighting Design** All exterior lighting shall be required to be of the fully-cut off and fully-shielded style to direct light downward (and not up or away) from the light source. The applicant shall coordinate with the County to ensure the lighting plan is consistent with the International Dark Sky Association Model Lighting Ordinance.	Lighting plans consistent with these requirements shall be submitted to County prior to approval of building permit. (Use Permit COA)	Applicant	County
3.2	**Land Use and Agriculture**			
3.2-1	**Right-to-Farm Disclosure** In accordance with the Lake County Code, the Applicant and/or HOA will inform prospective buyers of property, future owners, and current occupants of the project site of the County's Right-to-Farm Ordinance. This notification requirement will be included in the conditions, covenants, and restrictions (CC&Rs) for the Proposed Project. Additionally, buyers shall sign an acknowledgement of the disclosure statements once informed of the Right-to-Farm Ordinance, which shall be kept on file by an authorized agent of the Applicant and/or HOA. The notification shall include a description of adjacent agricultural operations so that buyers within the Proposed Project are aware of operational aspects of agricultural uses (e.g. noise, odors, and dust). The disclosure shall also state that operations from the agricultural equipment may routinely exceed the Lake County Noise Ordinance standards.	Applicant to put note on Final Maps. County to require note to be recorded with Final Maps.	Applicant/County	County
3.2-2	**Agricultural Conservation** For every acre of prime farmland and unique farmland identified by the Farmland Mapping and Monitoring Program that is converted to non-agricultural uses, the Applicant shall place an agricultural conservation easement, deed restriction, or other form of long-term permanent protection on farmland of equivalent quality to the farmland that would be converted. This farmland shall be permanently protected and located within 100 miles of the Guenoc Valley Site. This farmland shall also have access to necessary infrastructure for farmland operations, such as roads. There shall be at least a 100 foot buffer between the easement and residential development (a smaller buffer may be utilized if determined acceptable by the agricultural commissioner). For Phase 1, this will require that approximately 28.4 acres of Prime Farmland, and approximately 22.1 acres of Unique Farmland are permanently preserved in accordance with this mitigation measure. The acreage requirements for future phases will be based on the specific development proposals and associated area of impacted farmland. The County shall verify the precise size of impact and therefore the relative size of land to be conserved prior to approval of the associated final phased tentative maps.	Applicant to record agricultural conservation easement, deed restriction, or other form of long-term permanent protection on farmland as required by County prior to submittal of Final Maps, and provide proof recordation with submittal of Final Maps.	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.3	**Air Quality**			
3.3-1	**Measures to Reduce Short-term Construction Related Emissions** The following measures will be implemented by the Proposed Project to reduce emissions of criteria pollutants and DPM from construction. a) Prior to approval of Grading or Improvement Plans- (whichever occurs first) the Applicant shall submit to LCAQMD a Construction Emission/Dust Control Plan within 30 days prior to groundbreaking. The following shall be listed on the improvement plans as standard notes: • During construction, emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area, shall be controlled so that dust does not remain visible in the atmosphere beyond the boundary line of the emission source. • When wind speeds result in dust emissions crossing property lines, and despite the application of dust control measures, grading and earthmoving operations shall be suspended and inactive disturbed surface areas shall be stabilized. • Fugitive dust generated by active operations, open storage piles, or from a disturbed surface area shall not result in such opacity as to obscure an observer's view to a degree equal to or greater than does smoke as dark or darker in shade as that designated as No. 2 on the Ringlemann Chart (or 40 percent opacity). • All exposed soils be watered as needed to prevent dust density as described above and in order to prevent dust from visibly exiting the property. • Any visible tracked out dirt on a paved road where vehicles enter and exit the work area must be removed at the end of the workday or at least one time per day. Removal shall be accomplished by using wet sweeping or a HEPA filter equipped vacuum device. Dirt from vehicles exiting the site shall be removed through the use of a gravel pad, a tire shaker, a wheel wash system, or a pavement extending for not less than 50 feet from the intersection with the paved public road. • All haul trucks transporting soil, sand, or other loose material offsite shall be covered. • All vehicle speeds on unpaved roads shall be limited to 25 mph. • During construction the contractor shall, where feasible, utilize existing power sources (e.g., power poles) or clean fuel (i.e. gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. Signs shall be posted in the designated queuing areas of the construction site to remind off-road equipment operators that idling time is limited to a maximum of 5 minutes. b) In conjunction with the submittal of the Construction Emission/Dust Control Plan, the prime contractor shall submit to the District a comprehensive inventory (i.e.,	Applicant submit to LCAQMD a Construction Emission/Dust Control Plan and other information conforming to this Mitigation Measure within 30 days prior to groundbreaking. County to review prior to issuing Grading or Improvement Plans- (whichever occurs first). (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used in aggregate of 40 or more hours for the construction project. If any new equipment is added after submission of the inventory, the prime contractor shall contact the LCAQMD prior to the new equipment being utilized. Except in the event of emergency work, when no notice shall be required, the project representative shall provide the District, at least one business day prior to the use of subject heavy-duty off road equipment with the anticipated construction timeline including start date, name and phone number of the property owner, project manager and on-site foreman. The equipment inventory shall meet the minimum requirements as specified in MM 3.3-1c, including the use of Tier 4 engines or better to the maximum extent feasible, and Level 3 Diesel Filters during all phases of development. c) To the maximum extent feasible, the contractors shall utilize Tier 4 engines or better, and Level 3 Diesel Filters during all phases of development. Compliance must be demonstrated with submittal of the equipment inventory, prior to approval of dust control plans.			
3.3-2	**Project Measures to Reduce Operational Emissions** Prior to the issuance of the first certificate of occupancy for the relevant portion of the project (i.e., residential or commercial), as appropriate, the Applicant shall provide documentation to the County that the following measures have been achieved. It should be noted that these measures do not apply to on-going uses within the property that are not a component of the Proposed Project, including agricultural operations conducted under third party leases. <u>Transportation Demand Management Measures</u> Implement MM 3.13-4 to develop and implement a Transportation Demand Management (TDM) Program to achieve a reduction in vehicle miles traveled (VMT) as a result of the Proposed Project. At a minimum these measures will include: • Dedicated on-site parking for shared vehicles (vanpools/carpools); • Adequate, safe, convenient, and secure on-site bicycle parking and storage in the commercial portion of the project; and • Use of an electric fleet for internal transport vehicles (excluding trucks and other ranch vehicles for on-going agricultural and grazing activities) to the extent feasible (no less than 75%), including the golf course. <u>Project Wide Measures</u> • Use energy-efficient lighting that will reduce indirect criteria pollutants and greenhouse gas (GHG) emissions. Using energy-efficient lighting will reduce energy usage and, thus, reduce the indirect GHG emissions from the Proposed Project. Energy-efficient lighting includes adaptive lighting systems or systems that achieve energy savings beyond those required by Title 24 lighting requirements to the maximum extent feasible. • Utilize low-flow appliances and fixtures;	Applicant to prepare TDM Program compliant with this Mitigation Measure and submit to County. County to review and approve prior to issuance of the first certificate of occupancy. (Use Permit COA) Lighting plans consistent with these requirements shall be submitted to County prior to approval of building permit. (Use Permit COA) Improvement Plans consistent with these requirements shall be submitted to County prior to approval of Final Maps. (TM COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
• Use of state-of-the-art irrigation systems that reduce water consumption including graywater systems and rainwater catchment. • Use of drought-tolerant and native vegetation. • Low volatile organic compound paint shall be utilized for parking areas and the interiors and exteriors of the both residential and non-residential buildings. <u>Residential Measures</u> • Facilitate achievement of zero net energy buildings through installation of solar photovoltaic systems consistent with the 2019 Building Energy Efficiency Standards, CCR Title 24 Part 6. Compliance with this requirement must be demonstrated prior to issuance of occupancy permits for residential uses. • Provide electrical outlets on the outside of the homes or outlets within the garages to encourage the use of electrical landscaping equipment. • Use water efficient landscapes and native/drought-tolerant vegetation. • Install smart meters and programmable thermostats. • Use energy-efficient appliances in the residences where available. These include appliances that meet U.S. Environmental Protection Agency (USEPA) Energy Star Criteria. <u>Resort/Commercial Measures</u> • Facilitate achievement of zero net energy buildings through the construction standards required under the 2019 Building Energy Efficiency Standards, CCR Title 24 Part 6 and the use of rooftop or on-site photovoltaic systems, with or without storage, or the acquisition of renewable energy or energy credits from another source, or generation onsite. Zero Net Energy shall mean that on a community-wide basis, the actual annual consumed energy will be less than or equal to the renewable generated energy utilized. It is the Project's goal to obtain enough renewable electrical energy for the Project's needs and to distribute it throughout the Guenoc Valley Site. Therefore, renewable energy supplies shall be secured and/or systems installed for each commercial structure prior to issuance of its final certificate of occupancy. • Install on-site charging units for electric vehicles consistent with parking requirements in California Green Building Standards Code Section 5.106.5.2. • Install electric water heating instead of gas water heating for some or all of the project's hot water needs, to the extent such technology is readily available and commercially practicable.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4	**Biological Resources**			
3.4-1	**Construction Best Management Practices (BMP)** A) Construction and staging areas shall not be larger than necessary and to the degree feasible shall be within areas otherwise scheduled for development. These areas shall be visibly demarcated prior to construction activities to prevent unnecessary impacts. Equipment shall not be kept outside established areas. B) Construction areas shall be kept serviceably clean. Sufficient closed bins shall be provided for trash and debris. Washout, track out, and dust control BMPs shall be implemented as necessary. Construction vehicles and equipment shall be clean and free of mud or vegetation that could introduce plant pathogens or propagules of non native plants. This includes equipment hauled onto the site. C) Pets shall not be allowed within construction areas. D) Construction activities shall be carried out such that sensitive habitats are avoided. Materials shall not be placed where they may enter sensitive habitat, receiving waters, or a storm drain, or be subject to wind or runoff erosion and dispersion. E) Equipment use shall be limited to the hours from 7:00 a.m. to 7:00 p.m. to the extent possible. Exceptions may be made if approved by the County for situations where a longer construction schedule would alleviate the potential for adverse environmental effects.	The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-2	**Worker Environmental Awareness Training** Construction personnel working on the Proposed Project shall be provided with an Environmental Awareness Training tailored to the location they will be working on prior to the commencement of construction work by that personnel. This training shall include materials that describe the sensitive habitats and special status wildlife species with the potential to occur. Table 3.4-9 in Final EIR, Volume II, Section 3.4 dictates species for which environmental awareness training shall occur, based on location. Topics covered shall include relevant biological information on these species, and the appropriate actions that shall be taken in the event of an occurrence. Training shall also include a description of construction best management practices and the importance of environmentally conscious construction. Training materials shall be prepared by a qualified biologist who shall train a member of the contractor's crew to provide follow-up trainings to newly hired employees during the construction period. The qualified biologist shall attend the Environmental Awareness Training quarterly, at a minimum, to ensure that the training sufficiently covers the necessary materials. These materials may be updated as new information is available. Construction personnel shall sign a training log stating that they have received this training. Copies of this training log shall be maintained on the Guenoc Valley Site and shall be made available to inquiring agencies upon request. Construction personnel will also be trained to identify nesting bird behavior that indicates construction activities are causing a significant disturbance to nesting birds. This behavior includes vocalizing, making defensive flights at intruders, getting up from a brooding position, or flying off the nest. Should these behaviors be identified, construction workers will be trained to halt work in the vicinity of the nest until a qualified biologist determines a suitable nest buffer. Should a special-status species be observed by construction personnel, the qualified biologist will verify the observation and report the observation to CNDDB. The qualified biologist shall also report observations of special-status species identified during preconstruction surveys, if any.	The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant	County

3.4-3 **General Special-Status Plant Mitigation** A) Pre-construction botanical surveys of herb-dominated habitats (i.e. grasslands, wetlands) with the potential to support special-status plants shall be conducted within those areas scheduled for groundbreaking during one of the two appropriate identification seasons prior to ground breaking. It should be noted that surveys conducted in 2018 and 2019 for Phase 1 would meet the requirements of this measure for construction activities occurring in 2020 and through a portion of 2021, depending on the exact timeframe of construction and the potential species impacted. Pre-construction surveys of shrub or woodland dominated habitats with the potential to support special-status plants shall be surveyed within one of the four appropriate identification seasons prior to groundbreaking for each specific component of the Proposed Project. Initial vegetation clearing along proposed roadways for fire management shall also be subject to these standards. Pre-construction surveys shall be completed by a qualified biologist during the appropriate identification period for plants with the potential to occur in the area scheduled for ground breaking. Results of the pre-construction survey shall be maintained on the Guenoc Valley Site and available to agencies upon request. B) In the event that the results of the pre-construction special-status plant surveys identify the presence of individual special-status plants within areas identified for ground disturbance activities, one of the following measures shall be conducted. 1) Individual occurrences of special-status plants shall be avoided by a minimum of 20 feet when possible. This buffer shall be demarcated by a qualified biologist with high-visibility fencing. Where ground disturbance would occur within 100 feet upslope of occurrences of special-status plants during the wet season (October 1 through April 1), silt fencing or straw wattles shall be installed between the work area and the 20-foot setback and shall not be removed until the disturbed areas have been revegetated or otherwise stabilized. OR 2) When avoidance of a special-status plant is not feasible, mitigation shall occur through transplanting or compensatory planting of in-kind species. Mitigation for special-status plants shall follow the general outline below. i. For compensatory plantings, in-kind species shall be planted at a minimum ratio of 2:1. Monitoring of mitigation activities shall be performed by a qualified biologist for a minimum of three years. The qualified biologist shall prepare an annual report on the progress of mitigation with recommended management actions. Mitigation shall be deemed complete once the qualified biologist has determined that the mitigation has achieved or exceeded 80 percent success following the minimum three years of monitoring. Additional years of monitoring and management shall occur should mitigation fail to meet success criteria. ii. Should transplanting of individual plants be considered, the transplanting shall be overseen by a qualified biologist. Plants shall be relocated to suitable habitats and shall be within designated open space as possible. A qualified biologist shall monitor all transplanted	The applicant shall perform pre-construction surveys prior to ground breaking as described in Mitigation Measure 3.4-3, and implement mitigation for identified species within one year of identification and prior to occupancy. The County shall verify implementation of mitigation prior to issuance of certificates of occupancy. (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	individuals for a minimum of three years to ensure successful establishment. The qualified biologist shall prepare an annual report on the success of transplanted plants. Should transplanting fail, compensatory actions shall occur as outlined under (i).			
iii.	Consultation with CDFW or USFWS shall occur as necessary, based on regulatory jurisdiction, should a special-status plant that does not have a history of successful transplantation and was not previously identified within the Phase 1 Area of Potential Effects be observed during preconstruction botanical surveys. For species with a demonstrated history of successful transplantation, then mitigation shall follow steps (i) and (ii) above.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-4	**American Badger Impacts** No more than 14 days before the start of ground disturbance activities on or within 200 feet of open grassland, a qualified biologist shall conduct pre-construction surveys to determine if American badger dens are present. If no dens are observed, no further mitigation is necessary. If American badger dens are determined to be present, the biologist shall monitor for activity to determine whether the den is active. If the den is determined to be occupied by a female with young, a 50-foot buffer shall be demarcated with high-visibility flagging until the qualified biologist has determined that young have matured and dispersed. No construction activities shall occur within the buffer while the den is actively supporting dependent young. If the den is determined to be active, but a female with young is not present, CDFW shall be contacted to determine if burrow exclusion using passive measures such as one way doors or equivalent may be utilized. Exclusion activities shall be attempted for a minimum of three days to discourage their use prior to any project-related ground disturbance. If the biologist determines that the dens have become inactive as a result of the exclusion methods, dens shall be excavated by hand to prevent them from being re occupied during construction.	The applicant shall perform pre-construction surveys the start of ground disturbance activities on or within 200 feet of open grassland as described in Mitigation Measure 3.4-4, and implement avoidance measures if required as described in Mitigation Measure 3.4-4. The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant	County
3.4-5	**Ringtail Impacts** No more than 14 days before the start of ground disturbance activities within open grassland, oak woodland, or riparian forest habitat, a qualified biologist shall conduct pre construction surveys to determine if ringtail dens are present. If no active ringtail dens are observed, no further mitigation shall be recommended. If ringtail dens with young are determined to be present within the work area, the biologist shall establish a clearly marked exclusionary buffer of no less than 50 feet with high-visibility flagging. No ground disturbance shall take place within the buffer until the biologist determines the den no longer supports dependent young.	The applicant shall perform pre-construction surveys as described in Mitigation Measure 3.4-5 no more than 14 days before the start of ground disturbance activities within open grassland, oak woodland, or riparian forest habitat, and implement avoidance measures if required. The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-6	**Bat Maternity Roosts and Special-Status Bat Impacts** Pre-construction survey(s) for bat roosts shall be conducted no more than 14 days prior to the start of construction in locations suitable for roosts or tree removal. Surveys of potential bat roost habitat shall concentrate on large trees (DBH >12 inches) specifically looking for relevant bat use features such as loose bark or cavities, broadleaf trees in riparian woodland habitat, buildings, bridges, and cliffs/rocky outcroppings on or within 100 feet of any planned work areas. Prior to construction on the Middletown Housing Site, foliage suitable for western red bat roosting shall also be surveyed. If no potential bat roosts are observed, no further mitigation shall be necessary. For trees proposed for removal that have been identified as potentially suitable habitat for special-status bat species, the following shall apply. Trees proposed for removal that have been identified as potentially suitable special-status bat habitat shall be removed using the two-day phased removal method described below: On day 1, branches and small limbs not containing potential bat roost habitat (cavities, crevices, exfoliating bark, etc.) shall be removed using chainsaws only. The remainder of the tree shall be removed on day 2. Removal shall occur during seasonal periods of bat activity. Removal shall occur as possible outside of maternity season. The maternity roosting season for bats is approximately February 1 through September 1 (but varies due to rainfall and temperature). The best time for removal of structures that may support maternity roosting is between February 1 and April 15. If an active maternity roost is detected, the tree(s) or structures shall be retained until after the young bats are no longer dependent on their parents for care as determined by a qualified biologist. If a special-status bat roost is observed during preconstruction surveys, appropriate avoidance or exclusion measures shall be developed in consultation with CDFW.	The applicant shall perform pre-construction surveys as described in Mitigation Measure 3.4-6 no more than 14 days prior to the start of construction in locations suitable for roosts or tree removal, and implement avoidance measures as described in Mitigation Measure 3.4-6 if required. The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-7	**Artificial Lighting Impacts – Construction and Operation** Lighting fixtures associated with the construction and operation of the Proposed Project shall be designed to ensure maximum efficiency, eliminate direct upward light, and reduce spill consistent with Design Guidelines and shall follow the general principles below: ▪ Site-wide lighting shall promote dark sky policies; ▪ Lighting along roadways, pathways, and within parking areas shall only be used to the extent necessary to guide nighttime navigation and ensure safety and security; ▪ Lighting shall be not be placed or illuminate higher than necessary to provide efficient lighting for its intended purpose; ▪ Lighting shall be deliberately directed downward and away from sensitive habitat types; ▪ Nighttime lighting shall also be reduced to the maximum extent feasible by turning off lights from the hours of 11 p.m. to 7 a.m., unless they are essential for safety or security purposes and are properly designed and installed to reduce light spillage. Lights that must be used during these designated nighttime hours shall be dimmed in order to reduce the intensity of light projected by the Proposed Project as possible and shall be minimized as appropriate through motion-sensitive lighting, lower intensity lights, and appropriately programmed timed lights. Appropriate lighting consistent with these measures and the Proposed Project's Design Guidelines shall be adhered to for all phases of construction at project-related sites.	Lighting plans consistent with these requirements shall be submitted to County prior to approval of building permits. (Use Permit COA)	Applicant	County
3.4-8	**Special-Status Birds - Nesting** Should any groundbreaking or construction-related work begin within the general Should any groundbreaking or construction-related work begin within the general nesting season (February 1 through August 31), a pre-construction nesting bird survey on and within 200 feet of ground-disturbing activities shall be completed by a qualified biologist no more than five days prior to the start of work. If no active nests are observed, no further mitigation shall be recommended. If active nests are observed during the pre-construction survey, a qualified biologist shall demarcate a protective, high-visibility buffer around the nest. Buffer size shall be determined by the biologist based on species, nest location, planned disturbance footprint, and presence of any visual or auditory buffers. The qualified biologist shall also consider any species-specific plans related to acceptable nest-avoidance measures compared to anticipated disturbance levels of construction. The exclusionary buffer shall remain in place until the chicks have fledged, are feeding independently and are no longer dependent on the nest as determined by a qualified biologist. Due to the known presence of several nesting raptor species, including eagles, on the overall Guenoc Valley Site primarily outside of the APE, targeted surveys for active raptor nests shall be conducted. For construction activities planned on the Guenoc Valley Site, Middletown Housing Site, or the Off-Site Infrastructure Improvement Areas	Should any groundbreaking or construction-related work begin within the general nesting season (February 1 through August 31), the applicant shall perform a pre-construction nesting bird survey on and within 200 feet of ground-disturbing activities as described in Mitigation Measure 3.4-8 no more than 5 days prior to the start of work, and implement avoidance measures as described in Mitigation Measure 3.4-8 if required. The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	within 0.5 miles of a documented eagle or protected falcon species nest, pre-construction surveys shall be conducted in accordance with the most current guidance available from USFWS and CDFW. If a special-status raptor nest is determined to be present on or within 0.5 miles of the work area, consultation with the USFWS and/or CDFW, based on regulatory jurisdiction, shall occur and any measures recommended or required by those agencies shall be incorporated into the project design.			
3.4-9	**Special-Status Birds – Burrowing Owl** A pre-construction survey shall be performed by a qualified biologist prior to the start of ground disturbing activities where suitable burrowing owl burrows (such as ground squirrel complexes) are present. The survey shall be performed according to the standards set forth by the Staff Report for Burrowing Owl Mitigation (CDFW, 2012). Pre-construction surveys shall occur no more than 14 days prior to ground disturbance. Should a burrow be observed in use by a burrowing owl, or if a burrow shows signs of use (pellets, whitewash, feathers), project activities shall be excluded within a 250-foot high-visibility buffer until the qualified biologist determines the owls are no longer present. For active burrows within an area of impact, passive exclusion techniques, such as one way doors, may be used to exclude burrowing owls from occupied burrows outside the nesting season or if the qualified biologist determines the burrow does not support an active nest. Once exclusion is completed and the biologist determines that the burrow is not occupied, the burrows shall be collapsed.	The applicant shall perform a pre-construction survey as described in Mitigation Measure 3.4-9 no more than 14 days prior to ground disturbance, and implement avoidance measures as described in Mitigation Measure 3.4-9 if required. The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-10	**Western Pond Turtle Impacts – Construction** To the extent possible, initial ground disturbance, vegetation clearing, and associated project activities within 300 feet of ponds, reservoirs, or wetted streams where western pond turtle has been documented shall occur between July 1 and October 31 to avoid the peak nesting season and winter inactivity periods for western pond turtle. If work must occur within 300 feet of potentially occupied aquatic habitat between November 1 and June 31, a qualified biologist will conduct a preconstruction survey and identify areas with potential to support nesting or occupation by overwintering turtles, as applicable, depending on the season. These specific areas will be avoided if feasible. If these areas cannot be avoided, a qualified biologist will monitor their initial disturbance and relocate any pond turtles or turtle eggs that are uncovered or install an exclusion fence around the area, whichever is determined to be the best option to ensure survival of the turtle via discretion of the qualified biologist. If relocation is deemed appropriate, the qualified biologist will coordinate with CDFW to develop the relocation strategy. During the active period and outside of peak nesting (July 1 to October 31), a pre-construction survey for western pond turtle shall be completed by a qualified biologist no more than 14 days prior to the start of work within 300 feet of ponds, reservoirs, or wetted streams with the potential to support western pond turtle. If the species is observed, the biologist shall provide measures to avoid direct impacts based on the planned work. Such measures may include a protective no-work buffer, exclusion fencing, monitoring, or coordination with CDFW if relocation is required. These measures shall be implemented in the following manner: • If a no-work buffer of 300 feet is feasible, it shall be applied and no work shall occur within it. • If a no-work buffer of 300 feet is not feasible, work may occur with an on-site biological monitor, or after the installation of an exclusion fence facilitated by the qualified biologist that encircles areas with potential to support pond turtles or otherwise prevents pond turtles from entering the impact area. Exclusionary fence shall be constructed of silt fence no lower than 24 inches in height and the bottom edge will be buried or otherwise secured to the ground to prevent turtles from crossing go under it. A qualified biologist will inspect the exclusion fence after its installation. • If a pond turtle would be reasonably expected to incur injury from project work, a qualified biologist may relocate a pond turtle after coordinating with CDFW.	The applicant shall schedule initial ground disturbance per in Mitigation Measure 3.4-10. If such a schedule is not possible, the applicant shall perform a pre-construction survey as described in Mitigation Measure 3.4-10 no more than 14 days prior to the start of work within 300 feet of ponds, reservoirs, or wetted streams with the potential to support western pond turtle, and implement avoidance measures as described in Mitigation Measure 3.4-10 if required. The applicant shall include these requirements in construction contracts. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-11	**Foothill Yellow-Legged Frog Impacts – Construction** Work within 100 feet of any wetted stream feature or associated riparian area where foothill yellow-legged frog (FYLF) has been documented shall occur during the dry months (July 1 through October 31) as possible. Timing shall also occur outside of the FYLF breeding season (March 1 to June 30) to the extent possible. If work must occur between October 31 and June 30, a monitor shall be present, or FYLF shall be excluded from active work areas by an exclusionary fence that is at least 24 inches tall and has a no-climb barrier installed along the top. Prior to commencement of work, a qualified biologist will inspect the fence and work area to ensure proper installation and clearance of FYLF. Pre-construction surveys for FYLF within any wetted stream feature near a work area shall be conducted by a qualified biologist within 5 days of the onset of construction activities. Surveys shall cover between left and right bankfull at least 500 feet upstream and 500 feet downstream of the work area for presence of all life stages. Surveys shall extend up to 30 feet above bankfull within 100 feet of work areas when suitable, accessible habitat is present. Surveys shall be conducted during the day and under optimal conditions for detecting FYLF. Additional pre construction surveys may be required as determined by the qualified biologist. If FYLF are detected, measures to avoid the species shall be implemented. Such measures may include, but are not limited to, a protective no-work buffer, exclusion fencing, monitoring, and/or coordination with CDFW. These measures shall be implemented in the following manner: ▪ If a work area is within 100 feet of a perennial or intermittent stream with potential to support FYLF and work must occur between November 1 and March 1, a monitor will be present during work and will ensure that no FYLF are harmed by project work. If FYLF are located during preconstruction surveys within 500 feet of a work area that is within 30 feet of a wetted stream between March 1 and July 1, a monitor will be present during work. If FYLF are located within 100 feet of a work area that is located within 30 feet of a stream between July 1 and November 1, a monitor will be present. Any FYLF detected will be avoided by construction activities by at least 50 feet unless the monitor is positioned between the FYLF and the construction activity. ▪ Work areas can optionally be enclosed with exclusion fence as described above and no monitoring would be required. ▪ If a FYLF is found to be in a work area and cannot be avoided, the qualified biologist will coordinate with CDFW to develop an acceptable relocation strategy.	The applicant shall schedule work within 100 feet of any wetted stream feature or associated riparian area where foothill yellow-legged frog (FYLF) has been documented per in Mitigation Measure 3.4-11. If such a schedule is not possible, the applicant shall perform a pre-construction survey as described in Mitigation Measure 3.4-11 no at least 14 days prior to the onset of construction activities, and implement avoidance measures as described in Mitigation Measure 3.4-10 if required. The applicant shall include these requirements in construction contracts. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-12	**Invasive Species Management – Operation** Non-native wildlife shall not be intentionally released onto the Project site, with the exception of approved stocking of fish within isolated waterbodies. In order to address the creation of bullfrog habitat as a result of the Proposed Project, a Bullfrog Management Plan shall be created. The Bullfrog Management Plan shall include the following provisions: • Goals of the Bullfrog Management Plan; • Identification of target areas for bullfrog management; • Appropriate management actions designed to remove invasive bullfrogs such that an environmental benefit is achieved; • A suitable method of monitoring, adaptive management, and reporting throughout the duration of management.	The applicant shall prepare a Bullfrog Management Plan that meets the requirements of Mitigation Measure 3.4-12 and submit to the County for review prior to issuance of the first grading plans. (Use Permit COA) The applicant shall ensure that implementation of the Bullfrog Management Plan and restrictions on the release of non-wildlife are included in the CC&Rs and is the responsibility of the HOA. (TM COA)	Applicant	County
3.4-13	**Aquatic Habitat Public Signage** Signage at primary public access locations in proximity to western pond turtle or foothill yellow-legged frog habitat shall be posted that describes the sensitive nature of these habitat types and their importance within the Guenoc Valley Site ecosystem. Signage shall also include action items for visiting public to encourage protection of these valuable resources. This may include, but is not limited to: • Proper collection and disposal of trash; • Leashing of pets to prevent harassment of wildlife; • Passive activities to enjoy wildlife without disturbing natural behavior; • Discouragement of removal of plants or other biological resources; and • Restrictions on allowable transportation (vehicles, bicycles, horses, etc.) near sensitive habitat. Infrastructure shall also include waste receptacles sufficient in number and size to service public use of the Guenoc Valley Site with regular service to prevent over spilling. Removal of litter shall occur during servicing of waste receptacles.	Signage shall be installed prior to issuance of the first occupancy permit. (Use Permit COA) Maintenance of signage shall be the responsibility of the HOA, and this shall be included in the CC&Rs. (TM COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-14	**Future Phases Biological Review** Following the development of sufficient information related to future phases of development and prior to any on the ground impacts, a qualified biologist shall perform an updated and detailed analysis on impacts to biological resources within the future phases Area of Potential Effect. A report detailing any necessary survey methods, results, and analysis of potential future phases impacts shall be prepared to determine the application of Mitigation Measures 3.4-1 through 3.4 13, 3.4-15 through 3.4-21, 3.9-1, 3.9-2, and 3.10-2 to future phases, and the need for additional mitigation measures beyond those measures to reduce impacts of future phases to a less than significant level. The analysis shall be to the level of detail presented within this EIR. Additional mitigation shall be presented for those impacts determined to be significant or potentially significant following the inclusion of Mitigation Measures 3.4-1 through 3.4 13, 3.4-15 through 3.4-21, 3.9-1, 3.9-2, and 3.10-2. Additional mitigation shall be designed such that impacts to biological resources are reduced to less-than-significant levels and include avoidance, compensation, and monitoring similar to mitigation identified for Phase 1.	Applicant shall include in application for SPOD for future phases. County will ensure that this mitigation is implemented prior to approval of SPODs for future phases.	Applicant/County	County

3.4-15 **Impacts to Sensitive Habitats** Sensitive habitats shall be avoided to the maximum extent feasible. In areas where full avoidance of sensitive habitat types is not possible, mitigation shall occur as described below. This mitigation shall be applicable to impacts for purple needlegrass, musk-brush chaparral, white alder grove, Brewer willow thicket, Sargent cypress forest, and native grasslands: 1) Preservation of in-kind habitat shall occur at a minimum ratio of 2 acre:1 acre. 2) Areas designated for preservation shall be maximized within identified protection areas, such as sensitive habitats within Habitat Connectivity Easement Areas. Sensitive habitats within the Open Space Combining District that are not required to mitigate for impacts to POU resulting from vineyard development approved in the 2009 FEIR may be used for the purpose of this mitigation. 3) Preservation of in-kind habitat that occurs within residential lots shall occur only within open space prohibited from development (including landscaping and agricultural uses) by the Design Guidelines, or through the establishment of habitat easements within the residential lots. Preservation of sensitive habitat for the purposes of mitigation that occurs within deed-restricted open space shall be identified within the deed restriction and shall prohibit the development of that area identified for preservation. Preservation within deed-restrictions shall be preserved in perpetuity as a condition of the deed. 4) Areas that area preserved for in-kind habitat that occur outside of residential lots, Habitat Connectivity Easement Areas, and the Open Space Combining District shall be avoided during future phases of development. Should unavoidable impacts to in-kind habitat preservation areas occur during future phases of construction, those impacts shall be subject to additional compensatory actions set forth in this mitigation. Should insufficient habitat occur to offset future impacts, a compensatory habitat restoration, enhancement, and/or creation mitigation measure shall be prepared and approved by the County prior to on the ground impacts of future development phases. 5) Those areas selected for preservation shall be provided on a map to the County and approved by the County. The Applicant may additionally satisfy the 2:1 mitigation ratio through restoration, creation, and/ or enhancement of in-kind habitat. Mitigation performed through restoration, creation, or enhancement shall be monitored for a minimum of three years by a qualified biologist. The biologist shall prepare an annual report on the status of mitigation activities along with adaptive management recommendations as necessary. These reports shall be maintained by the Applicant and available to agencies upon request. Success criteria shall be as follows and shall require additional years of monitoring and management should mitigation fail to meet success criteria: ▪ Purple needlegrass and native grasslands shall achieve a percent native plant cover that meets or exceeds that of the habitat impacted. Non-sensitive grasslands and herb-dominated habitat types are suitable for restoration and creation activities. ▪ Musk-brush chaparral shall be restored in non-sensitive suitable habitat. Mitigation shall occur at a 2:1 acre ratio and shall achieve a 75 percent acreage establishment. The monitoring biologist shall consider percent cover, species	The applicant shall ensure that sensitive habitats are avoided as described in Mitigation Measure 3.4-15, and where avoidance is not feasible, implement mitigation described in Mitigation Measure 3.4-15. (Use Permit and TM COAs)The County shall review and approve mitigations prior to on the ground impacts of future development phases.	Applicant/County	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
composition, overall health of plantings, and other indicators when determining success of establishment. ▪ White alder grove and Brewer willow thicket may be restored along riparian corridors where invasive species or bank stabilization issues have occurred. Mitigation shall occur at a 2:1 acre ratio and shall achieve a 75 percent acreage enhancement. The monitoring biologist shall consider percent cover, species composition, bank stability, overall health of plantings, and other indicators when determining success of establishment. ▪ Sargent cypress forest shall be enhanced through the removal of competing foothill pines at an acreage ratio of 2:1 once annually for a total of five years and/or Sargent cypress trees shall be replanted at a 2:1 ratio and monitored for a total of five years. Replanting shall achieve a 75 percent success rate.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-16	**Oak Mitigation Plan** All All project activities shall be subject to compliance with the Oak Mitigation Plan, dated June 2020, included as Appendix OAK to this Final EIR. Prior to approval of final maps, the Applicant shall demonstrate compliance within the Oak Mitigation Plan related to impacts to oaks and oak woodland canopy. Prior to issuance of grading and building permits, the Applicant or applicants for grading and building permits shall demonstrate compliance with the Oak Mitigation Plan related to impacts to oaks, mitigation compliance, building envelope and deed restrictions. The Oak Mitigation Plan for this project addresses impacts to oaks as a result of the Proposed Project. The Oak Mitigation Plan was prepared in accordance with the Lake County General Plan. The Oak Mitigation Plan includes the following: ▪ Goals of the mitigation plan; ▪ Method of impact identification appropriate for all phases of construction; ▪ Discussion on compliance with the Lake County General Plan and 2008 Oak Tree Replacement Plan per the 2009 FEIR; ▪ Proposed compensatory action suitable to meet mitigation goals; ▪ Compensatory planting ratios of 2:1 for smaller trees and 5:1 for larger trees; ▪ Success criteria for mitigation such that compensatory plantings for impacts to individual trees achieve a minimum of 80 percent success rate; ▪ Preservation for impacts to valley oak woodland, when applied, shall be no less than 3:1 of in-kind habitat type acreage, and 2:1 for all other types of oak woodland; ▪ A requirement of at least 7 years of monitoring, adaptive management, and reporting throughout the mitigation process; and ▪ Limitation of the total impact to oak woodlands to 1 acre on residential lots consistent with the design guidelines. The Oak Mitigation Plan shall be subject to Lake County review and approval prior to ground disturbance. Oaks present on the Middletown Housing Site shall be avoided. If full avoidance of oaks is not feasible, the measures in the Oak Mitigation Plan prepared for the Guenoc Valley Site shall apply. Replanting for oaks removed on the Middletown Housing Site may occur on the Middletown Housing Site or the Guenoc Valley Site.	Prior to approval of final maps, the Applicant shall demonstrate compliance within the Oak Mitigation Plan related to impacts to oaks and oak woodland canopy. (TM COA) Prior to issuance of grading and building permits, the Applicant or applicants for grading and building permits shall demonstrate compliance with the Oak Mitigation Plan related to impacts to individual oaks, mitigation compliance, building envelope and deed restrictions. (Use Permit COA)	Applicant	County
3.4-17	**Aquatic Resources Protection and Management** Consistent with governing regulations and policies, the following setbacks shall be incorporated into the project design: ▪ 30 feet from the top of bank of perennial streams; ▪ 20 feet from the top of bank of any intermittent stream; ▪ 20 feet from the edge of any adjacent wetlands or the ordinary high water mark of ephemeral streams or other bodies of water (including reservoirs and lakes); or ▪ To the outer extent of a riparian corridor. No setback is required or recommended for man-made stormwater or irrigation ditches.	Setbacks are incorporated into the Design Guidelines and shall be administered by the HOA. The County will review compliance prior to issuance of building permits. Flagging shall be installed as described in Mitigation Measure 3.4-17. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
Should additional analysis of these features performed by a qualified biologist that determines larger setbacks are needed to ensure full protection of habitat based on factors such as slope, setbacks up to fifty feet may be required as possible and dictated by the conditions observed and analyzed. The setback distances identified above shall be delineated by a qualified biologist with high-visibility fencing or flagging prior to any construction activities occurring within 200 feet of the aquatic habitat features. No construction work or equipment staging shall occur within the setbacks unless a variance or permit is authorized to allow it. Prior to impacts, consultation shall occur with USACE and the RWQCB to determine the extent of federal and state jurisdictional wetlands and waters. A CWA Section 404 permit shall be obtained from USACE for impacts to any identified wetlands and waters subject to CWA jurisdiction, along with RWQCB state water quality certification for such permit under CWA Section 401, as necessary. An LSAA with CDFW shall be entered for those impacts to any identified streams subject to Fish and Game Code Section 1600 jurisdiction. Any necessary permits and approvals shall be obtained prior to the respective impacts for which they are required, and conditions of permits and approvals acquired for the Proposed Project shall be met. Mitigation shall occur consistent with the necessary permits and approval conditions required for the Proposed Project. Mitigation for direct impacts to aquatic habitats shall occur through a combination of habitat preservation, creation, or restoration/enhancement and shall, at a minimum, include the following: ▪ Should mitigation for aquatic resources occur through preservation, preservation shall occur at a minimum ratio of 2:1. Areas designated for preservation shall be maximized within the Open Space Combining District or within Habitat Connectivity Easement Areas, and may only occur within residential lots if preservation in perpetuity as a condition of the deed-restricted open space for the lot. Those areas selected for preservation shall be approved by the County and be subject to the compensatory actions set forth in this mitigation and necessary permit or approval conditions should future impacts to preserved habitats be identified. ▪ When mitigation occurs through the restoration or enhancement of habitat, mitigation shall occur at a minimum ratio of 2:1. Restoration and/or enhancement of habitat shall occur within the Open Space Combining District or within Habitat Connectivity Easement Areas as possible. Monitoring of mitigation activities shall be performed by a qualified biologist for a minimum of three years consistent with the terms of necessary permits. The qualified biologist shall prepare an annual report on the progress of mitigation with recommended management actions. Mitigation shall be deemed complete once the qualified biologist has determined that the success of restoration or habitat creation activities meets or exceeds 80 percent. ▪ When mitigation occurs through the creation of habitat, creation shall occur at a minimum ratio of 1:1. A qualified biologist shall monitor habitat creation activities on an annual basis and shall provide an annual report of these monitoring activities along with recommendations in order to ensure success of habitat creation.			

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
Following completion of habitat creation activities, a qualified biologist shall prepare an annual report on the progress of mitigation with recommended management actions. ▪ In cases of conflict between permit terms and measures presented herein, those permit terms and conditions shall supersede those presented within this EIR. Alternative forms of mitigation not detailed above may serve to satisfy mitigating requirements to jurisdictional wetlands and waters as dictated by the appropriate permit(s). Alternative forms of mitigation include purchase of habitat credits from an approved mitigation bank at a ratio not less than 2:1, or payment of in-lieu fees as set by the appropriate agency.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-18	**Sensitive Habitat Impacts from Wildfire Clearing** Sensitive habitats included below shall be avoided during removal of dead vegetation and fire fuel load reduction necessary for safety purposes in managing wildfire risk to the degree feasible. The following sensitive habitats shall be addressed in the following manner as it relates to fire management fire breaks, lop and scatter, and masticating outside of development areas: • Purple needlegrass grasslands – This habitat does not require wildfire risk fuel reduction activities. This habitat shall be avoided to the degree feasible. Equipment and vehicles shall not be used or staged within this habitat type. • Musk brush chaparral – This habitat does not require wildfire risk fuel reduction activities. This habitat shall be avoided to the degree feasible. Equipment and vehicles shall not be used or staged within this habitat type. • White alder grove – Due to limited distribution and association with natural riparian fire breaks, this habitat type should not require ongoing wildfire risk fuel reduction activities and shall be avoided as possible. Equipment and vehicles shall not be used or staged within this habitat type. If determined necessary by safety personnel, hand-clearing of dead vegetation may occur. • Brewer willow thicket - Due to the limited distribution and association with natural riparian fire breaks, this habitat type does not require wildfire risk fuel reduction activities. This habitat shall be avoided to the degree feasible. Equipment and vehicles shall not be used or staged within this habitat type. • Sargent cypress forest – This habitat may require occasional management for wildfire risk. Due to the sensitive nature of this habitat type, hand tools shall be the only acceptable use of vegetation management. No live Sargent cypress trees shall be felled. Equipment and vehicles shall not be used or staged within this habitat type. • Oak woodland - This habitat may require occasional management for wildfire risk. Due to the sensitive nature of this habitat type, hand tools or grazing shall be the only acceptable use of vegetation management. Should impacts to any living oak trees occur, they shall be mitigated for as outlined within the Oak Mitigation Plan. Equipment and vehicles shall not be used or staged within this habitat type. • Oak savanna – Cover for this habitat type is dominated by non-native annual grasses and would not likely require management for wildfire risk except limited grazing or mowing immediately adjacent to high risk fire areas such as within 50 feet of roads. Equipment use and staging may occur within areas of non-native annual grassland provided that the driplines of oaks are not impacted. Should impacts to any living oak trees occur, mitigation shall occur as outlined within the Oak Mitigation Plan.	The applicant shall ensure compliance with Mitigation Measure 3.4-18. Applicant to incorporate these measures into the Wildfire Prevention Plan and obtain County approval of revised Wildfire Prevention Plan prior to approval of Grading or Improvement Plans- (whichever occurs first). The applicant shall include these requirements in construction contracts. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-19	**Wildlife Movement – Fencing** Use of fencing shall be minimized throughout the Guenoc Valley Site and shall adhere to those restrictions set forth in the Design Guidelines for all phases of development. Fencing shall not be installed for the purpose of wildlife exclusion except in the case of safety or protection of agricultural resources or residential development areas, and shall be designed to allow for continued movement of non-target species as possible. Unless approved by the Home Owner's Association or for ongoing protection of agricultural resources or property, fencing exceeding six feet in height shall not be used. Fencing materials designed for the purpose of wildlife entrapment or injury shall not be used. Full perimeter fencing for residential lots exceeding two acres in size shall be prohibited unless consistent with the following wildlife-friendly fencing measures: • Fencing shall be reasonably visible to travelling wildlife to prevent collision with fencing, • Fencing shall not include low rails or wires that would prevent smaller dispersing animals from passing, • Fencing shall not present a top rail clearance exceeding six feet, and shall not exceed four feet when possible. Clearance height shall consider the ground slop approaching the fence such that the height of a jump required to clear the fence from the downslope side does not exceed six feet, and • Materials that entangle or otherwise entrap wildlife, such as loose wire, top or bottom barbed wires, shall be prohibited..	Fencing requirements are incorporated into the Design Guidelines and shall be administered by the HOA. The County will review compliance prior to issuance of building permits. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)		
3.4-20	**Wildlife Movement – Future Phases** Future phases of development shall retain the clustered development design and restriction on maximum allowable residential lot development standards set forth within the Design Guidelines. Residential lots shall be restricted to an allowable development area of 1.5 acres unless further restricted by the Design Guidelines, for example, in areas of oak woodlands. Development of future phases shall avoid riparian corridors that commonly serve as wildlife passageways with development setbacks to the degree feasible, as identified in Mitigation Measure 3.4-17. Setbacks and sensitive habitat avoidance shall also be maximized. Prior to implementation of future phases, additional analysis on the overall impacts to wildlife movement of proposed future phases development shall be performed by a qualified biologist to the level of detail presented within this EIR, and determine the extent to which implementation of Mitigation Measure 3.4-19 will reduce the impacts of proposed future phases development on wildlife movement. Should implementation of Mitigation Measure 3.4-19 not reduce the impacts of proposed future phases development on wildlife movement to a less than significant level, additional mitigation shall be determined by a qualified biologist such that impacts to wildlife movement are reduced to less-than-significant levels. Such mitigation may include use of Habitat Corridor Easements or other forms of designating open space.	Applicant shall include in application for SPOD for future phases. County will ensure that this mitigation is implemented prior to approval of SPODs for future phases.	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-21	**Domestic Cat Predation** The Home Owner's Association shall distribute to new residents informational resources on domestic cat predation on wildlife and methods to prevent such predation. These recommendations may include, but are not limited to: • Encouraging cat owners to keep cats indoor as possible; • Encouraging all residents to remove domestic cat attractants such as outdoor food bowls and uncovered trash; • Affixing bells to collars; • Having cats spayed or neutered to prevent establishment of feral colonies; and • Ensuring backyard bird feeders are not accessible to cats.	HOA shall prepare educational materials to provide to future homeowners prior to occupancy. Ongoing implementation of this mitigation shall be handled by the HOA.	Applicant	County
3.5	**Cultural Resources**			
3.5-1	**Avoid Historical and Archaeological Resources, Apply Appropriate Mitigation** <u>Phase 1 and Future Phase General Provisions</u> All of the identified cultural resource sites shall be avoided during project construction, development, and operation activities. A shapefile database shall be transmitted to the Applicant and included in the final contract with the construction contractor to ensure that cultural resource locations are avoided. Each site shall be added to subdivision maps, and any residential properties that include cultural resources shall be deed restricted to avoid construction on or immediately adjacent to the resource. This shall be accomplished by establishing a buffer of 50 feet around the perimeter of the site and erecting a semi-permanent fence that will remain in place throughout construction. The fence shall be installed with a qualified archaeologist and tribal monitor in attendance, and shall determine the established buffer for the location. The buffer can be reduced or modified to accommodate sensitive environmental conditions, based on the assessment of the qualified archaeologist and tribal monitor or cultural advisor (see Mitigation Measure 3.5-2). If construction will encroach closer than 50 feet, a qualified archaeological and tribal monitor shall be retained to monitor those activities. Should cultural resources be uncovered within the buffer, all construction in the in the immediate area shall halt until the find can be assessed for NRHP/CRHR eligibility in accordance with current professional standards using minimization measures and the provisions of the Unanticipated Discoveries Plan developed in compliance with Mitigation Measure 3.5-2. <u>Phase 1 Site-Specific Avoidance Strategies</u> Site P-17-425 shall be incorporated into proposed buffer zones for wetlands or oak woodlands. Should ground-disturbing work be required within 50 feet of either site, a qualified professional archaeologist shall be retained to monitor construction activities. If site elements are discovered during monitoring, the archaeologist, in consultation with Middletown Rancheria, then the archeologist shall design an appropriate mitigation plan in consultation with Middletown Rancheria. The sites designated as lithic scatters (P-17-399, 400, 401, -404, -1363, -1470, -1957, -	The applicant shall implement surveys, avoidance and monitoring as described in Mitigation Measure 3.5-1. The applicant shall include all of these requirements in construction contracts. (Use Permit COA) The applicant will delineate areas as described in Mitigation Measure 3.5-1 for deed restrictions on all final maps. (TM COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
1958, -1959, -1960, -1961, -1962, -1963, and -2027, the Back of House vineyard lithic scatter site, and the Hilltop Site) have not been evaluated for the NRHP or CRHR. They shall be avoided and/or incorporated into open space or wetland or vegetation buffers wherever possible. If ground-disturbing work is required within 50 feet of any of these sites, they shall be examined under the CARIDAP unless different and/or additional mitigation measures are identified through consultation with the Tribe. Analyses shall be competed in the field to the extent possible. Four other sites (P-17-417, -2035, -2038, and -2041) include lithic scatters and bedrock mortars; these sites cannot be evaluated under the CARIDAP protocol. These sites should similarly be incorporated into open space or other natural resource buffers where feasible. Should construction impacts be unavoidable, each affected site shall be investigated by a qualified archaeologist in collaboration with the Tribe accordance with current professional standards in order to assess eligibility to the NRHP or CRHR unless different and/or additional mitigation measures are identified through consultation with the Tribe. For resources that cannot be avoided, site-specific minimization and mitigation measures will be developed in consultation between the archaeologist and Tribal monitor. Occupation sites have an elevated potential to contain data and other values which would make them eligible for listing on the NRHP or CRHR. These sites (P-17-116, -256, -405, -411, -414, -416, -420, -421, and -2039), therefore, shall be accorded an extra degree of protection. Each of these sites shall be avoided, incorporated into open space or wetland or vegetation buffers wherever possible. The sites are presumed eligible for listing on the NRHP/CRHR and therefore shall be protected by semi-permanent construction fencing, to be maintained until construction in the vicinity has finished. Should avoidance be infeasible, these sites shall be subject to intensive Phase II evaluation in accordance with an individual Treatment Plan designed for each specific site subject to consultation with Middletown Rancheria. The primary method of mitigation will be through minimization and avoidance measures. Only in cases where minimization or avoidance is infeasible, or there are no other means of mitigation, may a program of archaeological Data Recovery be implemented in accordance with current professional standards. Construction in the vicinity of the site shall not resume until minimization measures or Data Recovery has been completed. Historic sites within Phase 1 impact areas, including P-17-406, -412, -1996, -2042, -2043, -2952, -2956, the Bohn Hill debris scatter, and the Ink Ranch corrals, shall be incorporated into open space or wetland or vegetation buffers wherever possible and avoided with a 15-foot fenced buffer; the fence shall remain in place until all ground-disturbing work within 50 feet of the resource has been completed. Should construction impacts to historic sites be unavoidable, the individual site shall be visited, compared to existing resource records, re-documented through resource update forms, and evaluated for the NRHP/CRHR. If eligible, appropriate treatment methods shall be included in a Treatment Plan designed in consultation with the Tribe, which shall be implemented prior to site disturbance.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	The Back of House vineyard site is located within an active vineyard and consequently has been disturbed; further disturbance will occur when the vineyard is removed prior to Back of House construction. This site has not been evaluated for NRHP/CRHR eligibility and will be more fully disturbed during construction of the Proposed Project. A CARIDAP testing and evaluation program shall be implemented prior to any new ground-disturbing activities at this location unless different and/or additional mitigation measures are identified through consultation with the Tribe. If the site is found or presumed eligible for listing on the NRHP/CRHR, a qualified professional archaeologist shall design an appropriate Treatment Plan in consultation with Middletown Rancheria; the Treatment Plan shall include the number and size of excavation units to be completed, laboratory or in-field analyses to be performed, documentation of results, and criteria to make a final recommendation to the NRHP/CRHR, all in accordance with Mitigation Measure 3.5-1. Construction activities in the vicinity of the site shall not resume until mitigation has been completed. Sites that may occur within Phase 1 development areas but which could not be relocated include: P-17-404, and -409. Accordingly, all ground disturbance proposed in areas where these sites have been previously plotted shall be monitored by a qualified archaeologist and Tribal monitor. In the event that site indicators are encountered, project-related activities shall cease and shall not resume within 50 feet of the find and the site shall be evaluated for NRHP/CRHR eligibility in accordance with the provisions of the Unanticipated Discoveries Plan unless different and/or additional mitigation measures are identified through consultation with the Tribe.			
3.5-2	**Worker Awareness Training, Unanticipated Discoveries Plan, Construction Monitoring** 1) Tribal Cultural Advisor: Prior to initial ground disturbance, the Applicant shall retain a project Tribal Cultural Advisor designated by the Tribe, to direct all mitigation measures related to tribal cultural resources as defined by Public Resources Code 21074(a). 2) Worker Awareness and Sensitivity Training: Prior to the beginning of grading (including ground-clearing) or any construction (including structure relocation), a qualified professional archaeologist shall administer a cultural resources awareness and sensitivity training program to all construction workers who will be performing grading or construction work. Either a tribal representative should assist with administering the training, or the training materials should be approved by the Tribal Cultural Advisor. The program shall include a review of the types of finds that could occur, regulatory requirements, and a list of contacts (with telephone numbers) in case of accidental discoveries. The training program shall be repeated periodically as new construction workers are added to the project. 3) Unanticipated Discoveries Plan: Prior to project construction, a qualified professional archaeologist shall be retained to prepare an Unanticipated Discoveries Plan in consultation with Middletown Rancheria, or to update an	The applicant shall implement monitoring and other actions as described in Mitigation Measure 3.5-2. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
existing Unanticipated Discoveries Plan supplied by the Tribe. At a minimum, the Unanticipated Discoveries Plan shall include: • Minimization of impact strategies to be agreed upon by the archaeological monitor and tribal monitor or tribal cultural advisor. Minimization measures mean: o Avoidance. Priority shall first be given to leaving cultural resources in place and avoidance of any further unnecessary disturbance. The highest priority is to avoid disturbance to cultural resources. All cultural resources shall be left in situ, that is, in place, in the same position in which they were discovered and shall not be removed from the discovery site until arrangements are made for reburial or transfer in accordance with the below. If leaving the resources in situ is not possible, temporary housing at a secured storage location at the discovery site mutually agreed upon by the archaeological and tribal monitor may be considered. o Reburial. In situations where avoidance is not feasible, priority shall next be given to immediately reburying the cultural resources in the same location as found, only deeper. In the event that the cultural resources cannot be re-buried in the same location, only deeper, then priority shall next be given to immediately re-burying the cultural resources in an appropriate location within 100 feet of their original discovery in an area that shall not be subject to future subsurface disturbances. If for any reason immediate reburial in place, only deeper, or in an appropriate location within 100 feet of the original discovery is not feasible, then cultural resources may be re-buried in an appropriate location as determined by the Tribal Cultural Advisor in an area that shall not be subject to future subsurface disturbances. o Transfer. In the event that avoidance and reburial above described is not feasible, cultural resources may be removed and transferred to a location designated by the Middletown Rancheria. o Laboratory studies, scientific analysis, curation, or video recording shall only be permitted if required to assess CRHR eligibility, or if such strategies are the only means available to mitigate impacts to CRHR eligible resources. Prior to conducting any such studies, the tribal cultural advisor must be consulted. The archaeologist may draw the cultural resources for mapping purposes; however, no electronic means of recording the cultural resources shall be permitted without prior consultation with the Middletown Rancheria. • Description of field or laboratory methods to be used to investigate Unanticipated Discoveries (also applicable to known resources that will be impacted by project construction), to include types of excavation units, screening methods, and sample collection, as appropriate; • A list of permitted in-field analyses or laboratories to be used for specific analyses, as appropriate; • Provisions for reburial or transfer of recovered materials, developed in consultation with Middletown Rancheria.			

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
• Measures for documentation of results, including forwarding results to the NWIC as appropriate; • A Burial Treatment plan, provided by the Tribe, shall be followed if Native American remains are discovered during construction; • Maps (provided in pdf and shapefiles to the construction contractor, Applicant, and County) of areas that have not been included in a previous archaeological survey; • Maps of known resource locations (provided in pdf and shapefiles) shall be included in any construction documents that include identification of archaeological monitoring areas, identification of sites where pre-construction archaeological testing or archaeological and tribal monitoring during construction is required, identification of appropriate buffer zones for individual site protection during construction, cease work requirements, unanticipated finds reporting requirements; • Assessment criteria to determine NRHP/CRHR eligibility; and • A no-collections policy will be instituted for the Proposed Project, except where a site-specific treatment plan or the Unanticipated Discoveries Plan developed in consultation with the Tribe, calls for collection of a sample of artifacts or materials and analysis. Should any cultural resources, such as wells, foundations, or debris, or unusual amounts of bone, stone or shell, artifacts, burned or baked soils, or charcoal be encountered during ground-disturbing activities, work shall cease within 100 feet of the discovery and the Construction Contractor, Applicant, and Middletown Rancheria shall be notified immediately. The Applicant shall retain a qualified professional archaeologist to assess the find in consultation with the Tribal Cultural Advisor. The Tribe must have an opportunity to inspect and determine the nature of the resource and the best course of action for avoidance, protection and/or treatment of tribal cultural resources to the extent permitted by law, should the find consist of prehistoric or historic-era materials related to Native American occupation or use of the vicinity. If the find appears to be eligible for listing on the NRHP or CRHR, or is determined to be a tribal cultural resource by the Middletown Rancheria, then the provisions of the Unanticipated Discoveries Plan shall be adhered to, which will include consultation with Middletown Rancheria for tribal cultural resources. If the find consists of historic-era materials unrelated to the Native American community, the archaeologist shall determine its significance in compliance with NHPA and CEQA criteria. If adverse effects to a cultural resource cannot be avoided, the Minimization Measures described under the requirements for the Unanticipated Discovery Plan shall be implemented to the extent feasible. 4) Construction Monitoring: The Applicant shall retain a team of professional archaeologists and tribal monitors to implement a monitoring program to observe initial ground disturbing activities from the surface to sub-soil (including testing, concrete pilings, debris removal, rescrapes, punchlists, pot-holing or auguring, boring, grading, trenching, foundation work and other excavations or other ground disturbance involving the moving of dirt or rocks with heavy equipment or hand tools within the Project area), ensure that buffer areas are marked, and halt construction in the case of new discoveries. The tribal monitoring shall be supervised by the project Tribal Cultural Advisor. The duration and timing of the archaeological			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	monitoring activities shall be determined by the lead archaeologist in consultation with the Tribal Cultural Advisor. The duration and timing of tribal monitoring will be determined by a cultural resources monitoring agreement between the parties. The Tribal Cultural Advisor will coordinate with the construction field supervisor to confirm where ground disturbing activities will occur and determine the location its tribal monitor would survey, monitor, spot-check or remain stationary. Where feasible, the archaeological and tribal monitors will work together at the same locations. If the Tribal Cultural Advisor determines that full-time monitoring is no longer warranted, he or she may recommend that tribal monitoring be reduced to periodic spot-checking or cease entirely. Tribal monitoring would be reinstated in the event of any new or unforeseen ground disturbances. Depending on the scope and schedule of ground disturbance activities of the Project (e.g., discoveries of cultural resources or simultaneous activities in multiple locations that requires multiple tribal monitors, etc.) additional tribal monitors may be required on-site. If additional tribal monitors are needed, the Tribe shall be provided with a minimum of three (3) business days advance notice unless otherwise agreed upon between the Tribe and applicant. The on-site tribal monitoring shall end when the ground disturbance activities are completed, or when the project Tribal Cultural Advisor has indicated that the site has a low potential for tribal cultural resources.			
3.5-3	**Future Phase Investigations** Because Future Phases of work will affect areas not yet included in an archaeological study, prior to undertaking construction in any Future Phase area, the Applicant shall retain a qualified professional archaeologist to complete a cultural resources study in coordination with Middletown Rancheria. The study shall determine whether any previous archaeological studies or cultural resources have been identified within the Future Phase development area. If no studies have been completed, or if previous study results are more than 15 years old, new studies shall be prepared including the results of background research, field surveys, identification and evaluation of resources, documentation of results, and submission of the report to Lake County and the NWIC upon completion. New surveys shall include both professional archaeologists and the Tribal Cultural Advisor (or his/her designee). These efforts shall be completed prior to ground-disturbing activities. If significant historic-era resources or significant archaeological sites are present, the development proposal shall designate the area surrounding the site as open space and the site shall be completely avoided. If avoidance is not feasible, a qualified professional archeologist shall be retained to evaluate NRHP/CRHR eligibility of the site, and, if eligible, shall design an appropriate Treatment Plan in consultation with Middletown Rancheria. The minimization measures outlined in the Unanticipated Discoveries Plan described under Mitigation Measure 3.5-2 shall be adhered to as feasible. Construction activities in the vicinity of the site shall not occur until mitigation has been completed, and the construction monitoring provisions of Mitigation Measure 3.5-2 have been implemented. Any newly identified resources uncovered during Future Phases shall be treated in accordance with Mitigation Measure 3.5-2 requirements.	Applicant shall include in application for SPOD for future phases. County will ensure that this mitigation is implemented prior to approval of SPODs for future phases.	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.5-4	**Cease Work, Contact County Coroner** California law recognizes the need to protect interred human remains, particularly Native American burials and items of cultural patrimony, from vandalism and inadvertent destruction. If human remains are uncovered during project construction, construction shall halt immediately within 100 feet of the find and the Lake County Coroner, County, and the Applicant shall be notified. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code §7050.5 and §7052 and California PRC §5097. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The County shall contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the County and a qualified professional archaeologist, shall develop a plan of action to avoid or minimize significant effects to the human remains prior to resumption of ground-disturbing activities.	The applicant shall implement monitoring and other actions as described in Mitigation Measure 3.5-4. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County
3.6	**Geology and Soils**			
3.6-1	**Final Design-Level Geotechnical Report(s)** The Applicant shall submit final design-level geotechnical report(s) produced by a California Registered Civil Engineer or Geotechnical Engineer for County review and approval. The report(s) shall address and make recommendations on the following: 1. Road, pavement, and parking area design; 2. Structural foundations, including retaining wall design (if applicable); 3. Grading practices; 4. Erosion/winterization; 5. Special problems discovered onsite, (e.g., groundwater, compressive/expansive/unstable soils/liquefaction potential); and 6. Slope stability (landslides). It is the responsibility of the Applicant to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report. If the geotechnical report indicates the presence of critically expansive soils or other issues that could lead to structural defects, a certification of completion of the requirements of the geotechnical report shall be submitted to the County Community Development Department prior to issuance of building permits. This certification may be completed on a lot-by-lot basis or on a tract basis. This shall be so noted on the Improvement Plans, in the CC&Rs, and on the Informational Sheet filed with the Final Subdivision Map(s). The preliminary geotechnical engineering report performed by RGH Consultants, dated May 29, 2019 and revised December 6, 2019, indicated the	The applicant shall prepare reports and take actions as described in Mitigation Measure 3.6-1. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	presence of potentially expansive soils and landslides, which must be addressed in a design-level geotechnical report. At a minimum, the following recommendations of the preliminary geotechnical engineering report shall be adhered to: 1. In general, cut and fill slopes should be designed and constructed at slope gradients of 2:1 (horizontal to vertical) or flatter, unless otherwise approved by the geotechnical engineer in specified areas. In expansive soil areas and serpentinite or highly weathered mélange bedrock, cut and fill slopes should be no steeper than 3:1. Where steeper slopes are required, retaining walls should be used unless approved by the project geotechnical engineer. Fill slopes steeper than 2:1 will require the use of geogrid to increase stability. If the owner is willing to accept ongoing maintenance, steeper slopes may be constructed within roadway cutslopes on a case-by-case basis. Cutslopes up to 1:1 may be allowable in certain areas with certain remedial measures. In general, slopes within serpentinite-derived soils and Franciscan mélange or serpentinite bedrock are highly weathered and are less stable than slopes on younger and/or harder bedrock types. In addition, some of the younger volcanic bedrock formations are rubbly to agglomeritic in nature and may be prone to rockfalls or debris flows as the clayey matrix becomes saturated on steep slopes. The geotechnical engineer should review preliminary site-specific grading plans and profiles for potential slope stability concerns. and/or 2. The proposed building envelopes must be located outside unstable areas and steep slopes in order to reduce the risks associated with slope instability. Initially, a structural setback of approximately 50 feet from unstable areas and breaks in slope of 2:1 or steeper should be established. A site-specific study by the project geotechnical engineer should finalize recommended structural setbacks.			
3.6-2	**Worker Training, Cease Work, and Consult with Qualified Paleontologist** A qualified professional paleontologist (as defined by the Society of Vertebrate Paleontology, 2010) provide awareness training, in written or multi-media form for construction personnel involved in earth-moving activities. Construction personnel to be involved with earth-moving activities shall be informed that fossils could be discovered during excavation that these fossils are protected by laws, on the appearance of common fossils, and on proper notification procedures should fossils be discovered. In the unlikely event that paleontological resources are encountered, work shall cease within 50 feet of the discovery, and the County shall be notified immediately. The Applicant shall retain a qualified professional paleontologist (as defined by the Society of Vertebrate Paleontology, 2010) to assess the significance of the find and recommend appropriate treatment measures. Recommendations shall include, but are not limited to, salvage and treatment as described by the Society of Vertebrate Paleontology (2010); this treatment shall include preparation, identification, determination of significance, and	The applicant shall implement monitoring and other actions as described in Mitigation Measure 3.6-2. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	curation into a public museum. Any recommended mitigation shall be completed before construction resumes in the vicinity of the find.			
3.7	**Greenhouse Gases and Climate Change**			
3.7-1	**Operational GHG Emissions** Prior to the issuance of the first certificate of occupancy for the relevant portion of the project (i.e., residential or commercial), as appropriate, the Applicant shall provide documentation to the County that the following measures have been achieved. It should be noted that these measures do not apply to on-going uses within the property that are not a component of the Proposed Project, including agricultural operations conducted under third party leases. <u>Transportation Demand Management Measures</u> Implement MM 3.13-4 to develop and implement a TDM Program to achieve a reduction in VMT as a result of the Proposed Project. At a minimum these measures will include: • Dedicated on-site parking for shared vehicles (vanpools/carpools); • Provide adequate, safe, convenient, and secure on-site bicycle parking and storage in the commercial portion of the project; and • Use of an electric fleet for internal transport vehicles (excluding trucks and other ranch vehicles for on-going agricultural and grazing activities) to the extent feasible (no less than 75 percent), including the golf course. Project Wide Measures • Use energy-efficient lighting that will reduce indirect criteria pollutants and GHG emissions. Using energy-efficient lighting will reduce energy usage and, thus, reduce the indirect GHG emissions from the project. Energy-efficient lighting includes adaptive lighting systems or systems that achieve energy savings beyond those required by Title 24 lighting requirements to the maximum extent feasible. • Utilize low-flow appliances and fixtures; • Use of state-of-the-art irrigation systems that reduce water consumption including graywater systems and rainwater catchment; and • Use of drought-tolerant and native vegetation. <u>Residential Measures</u> • Facilitate achievement of zero net energy buildings through installation of solar photovoltaic systems consistent with the 2019 Building Energy Efficiency Standards, CCR Title 24 Part 6. Compliance with this requirement must be demonstrated prior to issuance of occupancy permits for residential uses.	Applicant to prepare TDM Program compliant with this Mitigation Measure and submit to County. County to review and approve prior to issuance of the first certificate of occupancy. (Use Permit COA) Lighting plans consistent with these requirements shall be submitted to County prior to approval of building permit. (Use Permit COA) Improvement Plans consistent with these requirements shall be submitted to County prior to approval of Final Maps. (TM COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	• Provide electrical outlets on the outside of the homes or outlets within the garages to encourage the use of electrical landscaping equipment. • Use water efficient landscapes and native/drought-tolerant vegetation. • Install smart meters and programmable thermostats. • Use energy-efficient appliances in the residences where available. These include appliances that meet USEPAs Energy Star Criteria. <u>Resort/Commercial Measures</u> • Facilitate achievement of zero net energy buildings through the construction standards required under the 2019 Building Energy Efficiency Standards, CCR Title 24 Part 6 and the use of rooftop or on-site photovoltaic systems, with or without storage, or the acquisition of renewable energy or energy credits from another source, or generation onsite. Zero Net Energy shall mean that on a community-wide basis, the actual annual consumed energy will be less than or equal to the renewable generated energy utilized. It is the Project's goal to obtain enough renewable electrical energy for the Project's needs and to distribute it throughout the Guenoc Valley Site. Therefore, renewable energy supplies shall be secured and/or systems installed for each commercial structure prior to issuance of its final certificate of occupancy. • Install on-site charging units for electric vehicles consistent with parking requirements in California Green Building Standards Code Section 5.106.5.2. • Install electric water heating instead of gas water heating for some or all of the project's hot water needs, to the extent such technology is readily available and commercially practicable.			
3.7-2	**Construction GHG Emissions** Implement Mitigation Measure 3.3-1 to reduce GHG emissions from construction of the Proposed Project. a) To the maximum extent feasible, the contractors shall utilize Tier 4 engines or better, and Level 3 Diesel Filters during all phases of development. Compliance must be demonstrated with submittal of the equipment inventory, prior to approval of dust control plans.	Applicant submit to LCAQMD a Construction Emission/Dust Control Plan and other information conforming to this Mitigation Measure within 30 days prior to groundbreaking. County to review prior to issuing Grading or Improvement Plans- (whichever occurs first). (Use Permit COA)	Applicant	County
3.8	**Hazardous Materials**			
3.8-1	**Hazardous Materials Best Management Practices** The following mitigation measures shall be implemented prior to the issuance of grading permits: 1) Ensure through contractual obligations that all contractors prepare hazardous materials business plans and that they transport, store, and handle construction and remediation-related hazardous materials in a manner consistent with applicable regulations and guidelines. Components of the plan include, but are not limited to,	The applicant shall implement monitoring and other actions, and obtain permits as described in Mitigation Measure 3.8-1 prior is issuance of grading permits and during construction. The applicant shall include all of these	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	transporting and storing materials in appropriate and approved containers, maintaining required clearances, and handling materials in accordance with the applicable federal, State, and/or local regulatory agency protocols. The hazardous materials business plans shall be submitted to the Lake County Division of Environmental Health for review and approval. 2) In compliance with the CWA, a Stormwater Pollution Prevention Plan (SWPPP) shall be prepared for construction activities. Hazardous materials control measures identified in the SWPPP shall include, but not be limited to, the following: a. A spill prevention and countermeasure plan shall be developed, which identifies proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used onsite. b. Petroleum products shall be stored, handled, used, and disposed of properly in accordance with provisions of the CWA (33 USC § 1251 to 1387). c. During the wet season, construction materials, including topsoil and chemicals, and quarried materials shall be stored, covered, and isolated to prevent runoff losses and contamination of surface and groundwater. d. Fuel and vehicle maintenance areas shall be established away from all drainage courses and designed to control runoff. e. Sanitary facilities shall be provided for construction workers. f. Disposal facilities shall be provided for soil wastes, including excess asphalt during construction and demolition. g. Require that at all times a supervisor or other responsible employee trained in the proper handling, use, cleanup, and disposal of all chemical materials used during construction activities shall be present onsite and provide appropriate facilities to store and isolate contaminants. h. Encountered groundwater shall be removed from trenches and excavations in such a manner as to reduce potential contact with construction materials, construction personnel, surface waters, and, to the extent required by regulation or requirements, shall be disposed of at an appropriately permitted facility such as a wastewater treatment plant in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit.	requirements in construction contracts. (Use Permit COA)		
3.8-2	**Prepare a Hazardous Materials Contingency Plan** Prior to issuance of the grading permits, the Applicant shall provide to Lake County Division of Environmental Health a site-specific hazardous materials contingency plan. The plan will describe the necessary actions that would be taken if evidence of contaminated soil or groundwater is encountered during construction. The contingency plan shall identify conditions that could indicate potential hazardous materials contamination, including soil discoloration, petroleum or chemical odors, presence of underground storage tanks, or buried building material. Compliance with the plan will be included as a requirement within all construction bid specifications.	The applicant shall prepare a site-specific hazardous materials contingency plan, implement monitoring and other actions, and obtain permits as described in Mitigation Measure 3.8-2 prior is issuance of grading permits and during construction. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	If at any time during the course of constructing the Proposed Project evidence of soil and/or groundwater contamination with hazardous material is encountered, construction shall immediately cease and the Lake County Division of Environmental Health shall be contacted. Construction in the area affected by the contamination shall remain stopped until there is resolution of the contamination problem (through such mechanisms as soil or groundwater sampling and remediation if potentially hazardous materials are detected above threshold levels) to the satisfaction of Lake County Division of Environmental Health and Central Valley Regional Water Quality Control Board (CVRWQCB); construction on areas not affected by the contamination may continue during the remediation process. The plan, and obligations to abide by and implement the plan, shall be incorporated into the construction contract specifications of the project.			
3.8-3	**Minimize Potential for Accidental Release of Hazardous Materials during Demolition** a) Prior to demolition of existing structures, the Applicant shall: 1) Identify locations that could contain hazardous residues; 2) Remove plumbing fixtures known to contain, or potentially containing, hazardous materials; 3) Determine the waste classification of the debris; 4) Package contaminated items and wastes; and 5) Identify disposal site(s) permitted to accept such wastes. These activities will be conducted in compliance with all applicable federal, state, and local laws. b) Prior to demolition of existing structures, the Applicant shall provide written documentation to the County that asbestos testing and abatement, as appropriate, has occurred in compliance with applicable federal, State, and local laws. c) Prior to demolition of existing structures, the Applicant shall provide written documentation to the County that lead-based paint testing and abatement, as appropriate, has been completed in accordance with applicable State and local laws and regulations. Abatement shall include the removal of lead-contaminated soil (considered soil with lead concentrations greater than 400 parts per million in areas where children are likely to be present). If lead-contaminated soil is to be removed, the Applicant shall submit a soil management plan to Lake County Division of Environmental Health.	The applicant shall implement Mitigation Measure 3.8-3 prior is issuance of grading permits and during construction. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	County	County
3.8-4	**Reporting Geothermal Wells** As recommended by the Division of Oil, Gas, and Geothermal Resources (Division) within the Department of Conversion and according to the County General Plan, the following shall be performed concerning geothermal well sites for the Guenoc Valley Site and the Off-Site Infrastructure Improvement Areas: 1) The location of any known geothermal wells on the property shall be clearly identified on the project construction plans and communicated to the appropriate County recorder for inclusion in the title information of the subject real property.	The applicant shall implement Mitigation Measure 3.8-4 prior is issuance of grading permits and during construction. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	2) If any unknown geothermal well(s) is/are discovered during development, the County and the Division shall be notified immediately so that the newly discovered well(s) can be incorporated into the records and investigated in order to determine proper disposal, if required. Any previously unidentified wells found during project exploration and construction work shall be communicated to the appropriate County recorder for inclusion in the title information of the subject real property. This is to ensure that present and future property owners are aware of the wells located on the property, and the potentially significant issues associated with any improvements near geothermal wells. 3) Before work on a low or high temperature gradient well is performed, written approval from the Division in the form of an appropriate permit shall be obtained. This includes, but is not limited to, mitigating leaking fluids or gas from abandoned wells, modifications to well casings, and/or any other re- abandonment work. If any well needs to be lowered or raised (i.e., casing cut down or casing riser added) to meet the grade regulation standard of 6 feet below ground, a permit from the Division is required before work can start.			
3.8-5	**Asbestos Dust Mitigation Plan** Prior to construction activities, an Asbestos Dust Mitigation Plan shall be prepared and submitted to the Lake County APCD. The Plan shall include the following components in order to reduce asbestos dust generation and meet the requirements of an asbestos dust mitigation plan as specified in Asbestos Airborne Toxic Control Measures (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations: 1) Track-out prevention and control measures: a) Removal of any visible track-out from a paved public road at any location where vehicles exit the construction site via wet sweeping or a HEPA filter equipped vacuum device at the end of the work day or at least once per day. b) Installation of one or more of the following track-out prevention measures: i. A gravel pad designed using good engineering practices to clean the tires of exiting vehicles; ii. A tire shaker; iii. A wheel wash system; iv. Pavement extending for not less than 50 consecutive feet from the intersection with the paved public road; or v. Other measure that is deemed by the Lake County APCD as effective as the measures listed above. 2) Active storage piles will be adequately wetted or covered with tarps. 3) Control for disturbed surface areas and storage piles that will remain inactive for more than seven (7) days shall have one or more of the following done: a) Keep the surface adequately wetted; b) Establishment and maintenance of surface crusting that is sufficient to satisfy the test in subsection (h)(6) of the Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations;	The applicant shall prepare and implement an Asbestos Dust Mitigation Plan is described in Mitigation Measure 3.8-5 prior is issuance of grading permits and during construction. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
c) Application of chemical dust suppressants or chemical stabilizers according to the manufacturers' recommendations; d) Covering with tarp(s) or vegetative cover; e) Installation of wind barriers of 50 percent porosity around three sides of a storage pile; f) Installation of wind barriers across open areas; or g) Other measure that is deemed by the Lake County APCD as effective as the measures listed above. 4) Control for traffic on-site unpaved roads, parking lots, and staging areas shall include the following: 1) A maximum vehicle speed limit of 15 mph or less; and 2) One or more of the following: i. Watering every two hours of active operations or sufficiently often to keep the area adequately wetted; ii. Applying chemical dust suppressants consistent with manufacturer's directions; iii. Maintaining a gravel cover with a silt content that is less than 5 percent and asbestos content that is less than 0.25 percent, as determined using an approved asbestos bulk test method, to a depth of 3 inches on the surface being used for travel; or iv. Other measure that is deemed by the Lake County APCD as effective as the measures listed above. 5) Control for earthmoving activities shall include one or more of the following: a) Pre-wetting the ground to the depth of anticipated cuts; b) Suspending grading operations when wind speeds are high enough to result in dust emissions crossing the project boundary despite the application of dust mitigation measures; c) Application of water prior to any land clearing; or d) d. Other measure that is deemed by the Lake County APCD as effective as the measures listed above. 6) No trucks shall be allowed to transport excavated material offsite until the following are performed: a) Trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments; and b) Loads are adequately wetted and either: i. Covered with tarps; or ii. Loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than 6 inches from the top and that no point of the load extends above the top of the cargo compartment.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	7) Upon completion of the Proposed Project, disturbed surfaces shall be stabilized using one or more of the following methods: a) Establishment of a vegetative cover; b) Placement of at least 3 inches of non-asbestos-containing material; c) Paving; d) Any other measure sufficient to prevent wind speeds of 10 mph or greater from causing visible dust emissions. 8) If deemed applicable by Lake County APCD, an air quality testing component shall be developed and contain the following: a) Type of air sampling device(s); b) Siting of air sampling device(s); c) Sampling duration and frequency; and d) Analytical method.			
3.8-6	**Conduct Shallow Groundwater Characterization Plan for Construction of Off-Site Water Pipeline** Prior to obtaining a dewatering permit associated with trenching activities for the off-site water pipeline in Butts Canyon Road, a Shallow Groundwater Characterization Plan will be developed in consultation with the CVRWQCB. The Shallow Groundwater Characterization Plan will outline the appropriate number of shallow groundwater samples to be collected and the analytes to be assessed in order to determine appropriate dewatering methods during pipeline construction. The results of the Shallow Groundwater Characterization Plan shall be provided to the Lake County Division of Environmental Health and CVRWQCB. Should the results indicate the presence of contaminated groundwater, an individual dewatering permit shall be obtained from the CVRWQCB, and all conditions adhered to Methods for disposal of contaminated groundwater may include but are not limited to transporting the water to an approved facility for treatment and discharge in accordance with NPDES permit requirements.	Prior to obtaining a dewatering permit associated with trenching activities for the off-site water pipeline in Butts Canyon Road, the applicant shall prepare and implement a Shallow Groundwater Characterization Plan will be developed in consultation with the CVRWQCB is described in Mitigation Measure 3.8-6. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	County
3.9	**Hydrology and Water Quality**			
3.9-1	**Storm Water Pollution Prevention Plan** Consistent with the requirements of the State Water Resources Control Board General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ), the Applicant shall undertake the Proposed Project in accordance with a project-specific SWPPP. The CVRWQCB, the primary agency responsible for protecting water quality within the project area, is responsible for reviewing and ensuring compliance with the SWPPP. The recommended BMPs, subject to review and approval by the CVRWQCB, include the measures listed below. However, the measures themselves may be altered, supplemented, or deleted during the CVRWQCB's review process, since the CVRWQCB has final authority over the terms of the SWPPP. <u>General Construction</u>	The applicant shall obtain a project-specific SWPPP prior to ground disturbing activities and provide the County with verification of compliance with the permit. (Use Permit COA)	County	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
a. Schedule and sequence construction activities to minimize the areal extent and duration of site disturbance at any time. b. Provide work exclusion zones outside of work areas to protect vegetation and to minimize the potential for removing or injuring trees, roots, vines, shrubs, and grasses. c. Avoid disturbance of riparian and wetland vegetation by installing flagging and temporary fencing. d. Use berms, ditches, or other structures to divert natural surface runoff around construction areas. e. Install weed-free fiber rolls, straw-wattles, coir logs, silt fences, or other effective devices along drainage channels to prevent soils from moving into creeks. f. Locate stockpiles at least 50 feet from creeks, drainage channels, and drainage swales, whenever possible. g. Install fiber rolls, straw-wattles, or silt fencing between stockpiles and creeks, drainage channels, and drainage swales. h. After excavating any open-cut slopes, install slope protection measures such as fiber rolls, drainage ditches, or erosion control fabrics to minimize the potential for concentrated surface runoff to cause erosion. i. Implement wind erosion or dust control procedures consisting of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. The contractor may choose to cover small stockpiles or areas as an alternative to applying water or other dust palliatives. j. Control water application rates to prevent runoff and ponding. Repair leaks from water trucks and equipment immediately. <u>Hazardous Materials</u> k. Keep hazardous materials and other wastes at least 100 feet from wetlands, creeks, drainage channels, and drainage swales, whenever possible. l. Store hazardous materials in areas protected from rain and provide secondary containment to prevent leaks or spills from affecting water quality. m. Implement the following hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use or accidental spills or releases of contaminants: • Develop and implement strict on-site handling rules to keep construction and maintenance materials out of drainages and waterways. • Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel. Collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility. • Maintain controlled construction staging, site entrance, concrete washout, and fueling areas a minimum of 100 feet from stream channels or wetlands			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	whenever possible to minimize accidental spills and runoff of contaminants in stormwater. • Prevent raw cement; concrete, or concrete washings; asphalt, paint, or other coating material; oil or other petroleum products; or any other substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses. <u>Dewatering and Treatment Controls</u> n. Prepare a dewatering plan prior to excavation. o. Impound dewatering discharges in sediment retention basins or other holding facilities to settle the solids and provide treatment prior to discharge to receiving waters as necessary to meet Basin Plan water quality objectives. p. In order to meet the Basin Plan water quality objectives, install turbidity barriers and collect and treat drainage and runoff water from any part of the work area that has become turbid with eroded soil, silt, or clay to reduce turbidity prior to discharge to receiving waters. <u>Temporary Stream Crossings</u> q. Construct temporary stream crossings using a temporary bridge with gravel approach ramps or temporary culverts backfilled with clean gravel/cobbles and topped with a gravel road base. r. Do not place earth and rockfill material in stream channels. s. Upon completion of the Proposed Project, remove or stabilize temporary stream crossings with banks graded to a stable angle.			
3.9-2	**Aggregate/ Concrete Monitoring and Reporting Program** The Applicant shall undertake the proposed aggregate and concrete production facility in accordance with permit requirements of the CVRWQCB. The Applicant shall submit a Report of Waste Discharge to the CVRWQCB. The Applicant shall comply with monitoring requirements and discharge prohibitions identified by the CVRWQCB. The recommended discharge prohibitions, subject to review and approval by the CVRWQCB, include the specifications listed below. a. Aggregate wash water must be retained within designated operational area and may not be allowed to be percolated or disposed on land or to drainages. b. Aggregate wash and wastewater ponds must be lined and meet storage capacity requirements, maintain adequate freeboard, and be designed to protect ponds from inundation due to floods with a 100-year return frequency. c. Commingling aggregate wastewater and concrete wastewater is prohibited. d. Construct continuous interior asphalt or concrete berms around batch plant equipment (mixing equipment, silos, concrete drop points, conveyor belts, admixture	The applicant shall obtain a project-specific SWPPP prior to ground disturbing activities and provide the County with verification of compliance with the permit. (Use Permit COA)	County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	tanks, etc.) to facilitate proper containment and cleanup of releases. Rollover or flip top curbs or dikes should be placed at ingress and egress points. e. Direct runoff from the paved or unpaved portion of the concrete batch plant into a sump and pipe to a lined washout area or dewatering tank. f. All wastewater that contains residual concrete shall only be discharged to the concrete wastewater system (e.g., primary settling basin and secondary storage pond, or engineered alterative). g. Washout of concrete trucks must be conducted in a designated area with drainage to the concrete wastewater system. h. All stockpiled wastes and products shall be managed to prevent erosion of sediment to surface water drainage courses. i. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner consistent with Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.			
3.9-3	**Off-Site Groundwater Well Safe Yield Analysis and Monitoring** Prior to the issuance of an encroachment permit or grading permit for installation of off-site water line along Butts Canyon Road for the use of the off-site agricultural well for water supply on the Guenoc Valley Site, the Applicant shall provide to the County an analysis that defines the safe yield. The safe yield must be set to meet the following performance criteria: avoid drawdown of groundwater beyond 300 feet of the well. The analysis must incorporate pump testing of the well, and be certified by a Registered Professional Engineer or Registered Geologist. Groundwater pumping rates and durations must be limited to the safe yield determined in the hydraulic analysis. The safe yield analysis shall identify the location of one or more monitoring wells necessary to evaluate compliance with the performance criteria. Monitoring of groundwater pumping rates and durations and groundwater levels shall be performed quarterly for the first five years of use. The Applicant shall be required to submit annual monitoring reports that provide quarterly groundwater pumping and groundwater level data to the Lake County Health Services Department for the first five years of use. In the event these reports show an impact to the groundwater levels, the Lake County Health Services Department and the Applicant shall develop a Groundwater Management Plan in coordination with a geotechnical engineer for approval by the Community Development Director.	Prior to the issuance of an encroachment permit or grading permit for installation of off site water line along Butts Canyon Road for the use of the off-site agricultural well for water supply on the Guenoc Valley Site, the Applicant shall provide to the County an analysis that defines the safe yield as described in Mitigation Measure 3.9-3 and submit required monitoring reports as well as cooperate with the County to prepare a Groundwater Management Plan as described in Mitigation Measure 3.9-3. (Use Permit COA)	Applicant/County	County
3.9-4	**Floodplain Analysis** Prior to the issuance of a grading permit for any development within 1,500 feet of Bucksnort Creek or Putah Creek, the Applicant shall provide to the County a floodplain analysis certified by a Registered Professional Engineer. This analysis shall define the extent of floodwaters (floodplain) and the elevations associated with 100-year flood event within proposed development areas along these creeks. If, due to the performed analyses, the changes in the effective Floodplain Maps and Flood Insurance Studies occur, the Developer will apply for a Letter(s) of Map Revision with the Federal Emergency Management Agency.	The Applicant shall provide to the County a floodplain analysis meeting the requirements of this Mitigation Measure with applications for any grading permit for development within 1,500 feet of Bucksnort Creek or Putah Creek, along with Letter(s) of Map Revision with the Federal Emergency Management Agency	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
		if required. (Use Permit COA)		
3.9-5	**Inundation Mapping** Prior to the issuance of a grading permit for any development within 4,000 feet of Bucksnort Creek or Putah Creek, the Applicant shall provide to the County inundation maps of Detert Reservoir (Guenoc Lake), Langtry Lake, Bordeaux Lake, Burgundy Lake, and McCreary Lake dams that have been approved by Division of Safety of Dams.	The Applicant shall provide to the County inundation maps of Detert Reservoir (Guenoc Lake), Langtry Lake, Bordeaux Lake, Burgundy Lake, and McCreary Lake dams that have been approved by DSOD with applications for any grading permit for development within 4,000 feet of Bucksnort Creek or Putah Creek. (Use Permit COA)	Applicant	County
3.9-6	**Incorporation of Floodplains and Dam Inundation Zones in Site Plans** a. All site plans submitted to the County for the review of any development within 1,500 feet of Bucksnort Creek or Putah Creek shall identify the extent of the 100-year floodplain within proposed development areas. The 100-year floodplain shown shall be as certified by a Registered Professional Engineer. b. All site plans submitted to the County for the review of any development within 4,000 feet of Bucksnort Creek or Putah Creek shall identify the extent of the inundation zones of Detert Reservoir (Guenoc Lake), Langtry Lake, Bordeaux Lake, Burgundy Lake, and McCreary Lake dams within proposed development areas. Maximum inundation depths shall be identified on the site plans. c. For any facilities identified within the 100-year floodplain or inundation zone, including at the Guenoc Valley, Middletown Housing ,and off-site well sites, any hazardous materials or materials that may pollute flood waters such as, but not limited to fuel, oil, chemicals, pesticides, fertilizer, or cleaning products, shall be adequately protected from release in flood waters or relocated out of the 100-year floodplain and inundation zone.	Applicant to prepare site plans meeting the requirements of this Mitigation Measure and submit to County with applications for development as described in this Mitigation Measure. County to review and make determinations and require appropriate conditions of approval prior to any approvals of such conditionally permitted uses. (Use Permit COA)	Applicant/County	County
3.10	**Noise**			
3.10-1	**Restrict Construction Times in Areas in Proximity to Sensitive Receptors** Construction activities within 1 mile of occupied residential uses not within the Guenoc Valley Site, and where feasible, all construction deliveries, shall be restricted to occur between the hours of 7:00 A.M. and 7:00 P.M.	County to incorporate this restriction into the Conditions of Approval of the project. Applicant to add these requirements to construction contracts. (Use Permit COA)	Applicant/County	County
3.10-2	**Construction Noise Reduction** The following measures shall be implemented to reduce impacts of construction noise. • To reduce construction noise levels at off-site sensitive receptors as well as wildlife within the site, construction contractors shall be required to implement the following measures. These measures would be incorporated into the construction plan:	County to incorporate this restriction into the Conditions of Approval of the project. Applicant to add these requirements to construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	○ Equipment and trucks used for project construction shall utilize the best available noise control techniques, such as improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds. ○ Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, to achieve a reduction of 5 dBA. Quieter procedures will be used, such as drills rather than impact equipment. ○ Stationary noise sources shall be located as far from adjacent receptors as possible, and they will be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures. ○ Locate fixed construction equipment such as compressors and generators as far as possible from sensitive receptors. Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on power construction equipment. • Designate a disturbance coordinator and conspicuously post this person's number around the project site and in adjacent public spaces. The disturbance coordinator shall receive all public complaints about construction noise disturbances and shall be responsible for determining the cause of the complaint, and implement any feasible measures to be taken to alleviate the problem. • Well Drilling and Pipeline Construction Noise (Off-Site Infrastructure Improvement only): ○ Noise curtains shall be utilized during drilling of the well if, at the time of well construction, homes are occupied within 1,000 feet of the well.			
3.10-3	**Future Phases Noise Control** Prior to County approval of conditionally permitted uses which include more substantial exterior noise sources such as amphitheaters and event venues, a noise study shall be prepared by an acoustical engineer that identifies the necessary measures required to achieve compliance with the County's Noise Level Performance Standards at the nearest sensitive receptors. The County shall require that the measures identified in the noise study are implemented as a condition of approval of conditional use permits.	] (Use Permit COA)	Applicant/County	County
3.10-4	**Restrict Aircraft and Non-Emergency Helicopter Flight Times** Inbound and outbound flight times to and from the float dock and helicopter landing pads shall be limited to the hours of 7 A.M. to 7 P.M. every day of the week with exceptions for emergency situations only.	County to incorporate this restriction into the Conditions of Approval of the project. (Use Permit COA)	County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.13	**Transportation**			
3.13-1	**Implement Improvements at SR-29 and Butts Canyon Road** Prior to issuance of grading permits for Phase 1, the Developer shall execute and deliver to Caltrans an agreement to mitigate the impacts to the intersection of SR-29 and Butts Canyon Road by paying to Caltrans the cost of the following: • State Route 29 at Butts Canyon Road (Intersection #7) – Installation of an intersection control improvement—roundabout or three-way traffic signal with crosswalks, depending on results of an Intersection Control Analysis (ICE).	Applicant to enter into an agreement with Caltrans that meets the requirements of this Mitigation Measure prior to issuance of grading permits for Phase 1. (Use Permit COA)	Applicant	County
3.13-2	**Pay Fair Share towards Lake County Intersection Improvements** The Developer shall execute and deliver to Caltrans an agreement that requires payment, or provides bonding for, a proportionate share of the construction costs of the following improvements. The timing for collection of the fees and implementation of the improvements will be at the discretion of Caltrans as the lead agency. • State Route 29 at Hartmann Road (Intersection #5) – Expansion of the existing roundabout or other intersection control improvement, depending on the results of an Intersection Control Analysis (ICE; required under Baseline plus Phase 1). • SR-29 at Spruce Grove Road South (Intersection #3) – Installation of an intersection control improvement—roundabout or three-way traffic signal with crosswalks, depending on results of an ICE (required under cumulative plus Phase 1). • SR-29 at Hidden Valley Road (Intersection #4) – Installation of an intersection control improvement, roundabout or four-way traffic signal with crosswalks, depending on results of an ICE (required under cumulative plus Phase 1).	Applicant to enter into an agreement with Caltrans that meets the requirements of this Mitigation Measure prior to recordation of Final Maps. (TM COA)	Applicant	County
3.13-3	**Conduct Traffic Study and Implement Mitigation for Future Phases** As specified in the Development Agreement, an updated Project Level traffic impact analysis shall be completed prior to approval of future Project phases to determine if future phases would conflict with adopted circulation plans and policies. Improvement measures determined for future phases shall be coordinated with applicable jurisdictional agencies as appropriate, including Lake County, Napa County, City of Calistoga, and Caltrans.	Applicant to prepare updated project-level traffic impact analysis and submit to County with applications for future phases. County to review and make determinations/coordinate with other agencies prior to any approvals of future phases.	Applicant/County	County
3.13-4	**Implement a Transportation Demand Management Program** Prior to issuance of occupancy permits for Phase 1, the Applicant shall develop and submit to the County a final Transportation Demand Management Program for the Proposed Project. The TDM plan shall identify all feasible measures to reduce the VMT per capita of the Proposed Project to below the regional average to the extent feasible. The County shall verify compliance with the plan prior to issuance of occupancy permits for the Proposed Project. Additionally, the Applicant shall undertake annual monitoring and reporting of the TDM Plan, in accordance with Section 1.4 of Appendix TDM. Section 1.4 of Appendix TDM includes provisions regarding the timing, scope, and implementation of monitoring and reporting requirements, and requires the Applicant to adjust the TDM	Applicant to prepare TDM Program compliant with this Mitigation Measure and submit to County. County to review and approve prior to issuance of the first certificate of occupancy. (Use Permit COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
plan based on the monitoring results. The following strategies shall be identified within the TDM plan to reduce the VMT generated by the Proposed Project: ▪ *Private Shuttle Service* – There are currently no plans for Lake Transit to run buses along Butts Canyon Road near the project site and the nearest bus stops are about six miles away in Middletown. While it is possible Lake Transit might consider adding a stop on Butts Canyon Road in the future to serve project employees, it is our understanding that there is no funding available for it at this time. Alternatively, the project could potentially provide a frequent direct weekday shuttle service specifically for employees during the peak morning and evening commute periods. This could operate between the project site any and off-site work force housing with a stop at the Lake Transit bus transfer point in Middletown. Please note that shuttles would need be fully accessible to passengers using wheelchairs. It is recommended the applicant also explore providing a real-time smart-phone app that tracks arrivals to make shuttle use more reliable and convenient. Shuttle service for patrons of the project has been assumed as part of this analysis. The current assumption is that regular shuttle service to and from San Francisco and Sacramento will accommodate approximately 40% of resort patrons. The management shall monitor and provide adequate shuttle headways to accommodate all employees and guests who wish to use the shuttle services. ▪ *Carpool and Ride-Matching Assistance Program* – Although on-site employee parking is limited, the management shall offer personalized ride-matching assistance to pair employees interested in forming commute carpools. As an enhancement, management may consider using specific services such as ZimRide, TwoGo by SAP, Enterprise RideShare, 511.org RideShare or the equivalent. ▪ *Preferential Parking for Carpoolers/Vanpoolers* – The management shall offer preferential carpool parking for eligible commuters. To be eligible for carpool parking, the carpool shall consist of three or more people. The number of preferential parking spaces will be based on the number of participants in the program. The management shall monitor and provide adequate carpool spaces to meet or exceed potential demand. ▪ *Dedicated Parking Spaces for Car Share Services* – The management will set aside parking spaces to be dedicated for use by car share services to serve employees. This is expected to reduce parking demand and GHG emissions associated with the project by providing more flexibility for employees who otherwise utilize alternate modes. The availability of car share services within a project can potentially reduce the demand for employees to own their own cars. Car share services allow for employees to make midday trips without needing to have their own personal vehicle on site. The availability of car share services within a project can potentially reduce the demand for employees to commute by			

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
car or even own their own cars. In addition to dedicating parking spaces for car share services for employees, the management may consider dedicating additional parking spaces for car share vehicles dedicated for guest use, if demand exists. The availability of such cars makes traveling to the Project site without a personal vehicle more appealing for some guests The management shall monitor and provide adequate car share spaces to meet or exceed potential demand. ▪ *On-Site Sales of Transit Passes* – The building management shall offer direct on-site sales of Lake County Transit Authority transit passes purchased and sold at a bulk group rate to employees. Although Lake Transit Authority does not currently operate transit service to the site directly, some employees who live in the greater Lake County and surrounding areas may take public transit to Middletown and then could take the private shuttle to the Project site. Offering on-site transit pass sales reduces the barrier of purchasing transit passes and provides a bulk discount to employees, further encouraging transit use as a primary commute mode. ▪ *TDM Coordinator* – Management shall designate a "*TDM coordinator*" to coordinate, monitor and publicize TDM activities. The effectiveness of providing a TDM Coordinator on auto mode share is uncertain but is generally seen as a supportive measure that is beneficial to implement the other TDM measures. The Project sponsor may instruct the management company to designate their on-site manager as the TDM coordinator, or they may designate someone else. ▪ *Transportation and Commute Information Kiosks* - An information board or kiosk will be located in a common gathering area (e.g., lobby, employee entrance, break, or lunch room). The kiosk will contain transportation information, such as Emergency Ride Home (ERH), transit schedules, bike maps, and 511 ride-matching. Information will be updated periodically by the designated TDM Coordinator. ▪ *Tenant Performance and Lease Language – TDM Requirements* - For all tenants, the applicant will draft lease language or side agreements that require the identification of a designated contact responsible for compliance and implementation of the TDM program. ▪ *Tenant/Employer Commute Program Training* - As needed and applicable, the applicant or property management will provide individual tenants of the project with initial TDM (and commute) program training, and commute program start-up assistance. The overarching goals of this support function are to reduce commute trips for employees and assist with employee marketing and outreach. ▪ *Employee Transportation Brochure* - All employees will be provided with an Employee Transportation Brochure regarding the Commute Program. This			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	brochure will include (but not be limited to) information about shuttle service, carpool parking, transit opportunities, ride-matching services, bicycle routes, and emergency rides home.			
3.13-5	**Pay a Fair Share towards Pedestrian and Bicycle Improvements** Prior to issuance of occupancy permits for Phase 1 and future phases, the Applicant shall enter into an agreement with the Lake City/County Area Planning Council to pay a proportionate impact fee towards pedestrian and bicycle improvement projects in Lake County and Middletown.	Applicant to enter into an agreement with Lake City/County Area Planning Council that meets the requirements of this Mitigation Measure prior to issuance of the first certificate of occupancy. (Use Permit COA)	Applicant/ Lake City/County Area Planning Council	County
3.16	**Wildfire**			
3.16-1	**Fire Prevention during Construction** Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws. During construction, staging areas and areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak. Additionally, the following measures shall be required on the Guenoc Valley Site: • Every work area shall have one round tip shovel, and one water type fire extinguisher accessible within 10 feet. • Portable Fire Extinguisher rated at a minimum of 4/ABC or larger shall be in every vehicle, or piece of equipment except for privately owned vehicles. • In general, during fire season, mowing of vegetation should be completed prion to noon. • Hot Work shall have Fire Watch in place during and 30 minutes after. • Persons activating 911 shall know where they are on property to give directions. • All persons shall have access to a cell phone or radio system to activate 911. • Persons activating 911 shall arrange an escort from the entrance at 22000 Butts Canyon Road to the location of the emergency for the first arriving emergency apparatus. • Each construction site shall be provided with a hand held pressurized air horn such as a marine device (or similar) to alert others of an emergency.	Applicant to incorporate these measures into the Wildfire Prevention Plan and obtain County approval of revised Wildfire Prevention Plan prior to approval of Grading or Improvement Plans- (whichever occurs first). Wildfire Prevention Plan shall be issued to every contractor and construction crew. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.16-2	**Post-Wildfire Emergency Response** After a wildfire, response measures shall include actions to minimize slope instability and installation of warning signs. Immediate actions may include identifying impending threats to safety and property, checking all culverts to ensure proper drainage and installing erosion control mats and fiber rolls around steep areas. There shall also be long-term recovery and restoration actions to rehabilitate burned areas that have the potential to impact safety and property. The post wildfire emergency response plan (PWERP) will also include standards for a five-year long-term recovery and restoration plan to rehabilitate any burned areas that have the potential to impact safety and property. These measures could include restoring burned habitat, reforestation, mulching, and treating noxious weed infestations. This would be prepared by a qualified personnel with burned area restoration expertise and in coordination with and to the approval of the Lake County Department of Environmental Health.	Applicant to incorporate these measures into the Wildfire Prevention Plan and obtain County approval of revised Wildfire Prevention Plan prior to approval of Grading or Improvement Plans- (whichever occurs first). (Use Permit COA)	Applicant/County	County